

4.12 TRANSPORTATION/TRAFFIC

The information presented in this section is a summary of the Transportation Study for the Westfield Plaza Camino Real Revitalization Project (Transportation Study) prepared by Gibson Transportation Consulting, Inc. (2012). The Transportation Study is provided in Appendix F of this EIR.

The methodology and base assumptions used in this analysis were established in conjunction with the City of Carlsbad and the City of Oceanside and follow the procedures set forth by the San Diego Traffic Engineer's Council/Institute of Transportation Engineers, Border Section (SANTEC/ITE) Guidelines for Traffic Impact Studies (TIS) in the San Diego Region (SANTEC/ITE Guidelines; 2000) and the Circulation Element of the City of Oceanside's General Plan (City of Oceanside 2002). Peak hour segment analyses were conducted as required by the City of Carlsbad Growth Management Plan (GMP) Guidelines, assuming a maximum capacity of 1,800 vehicles per hour per lane (VPHPL) for all analyzed street segments regardless of roadway classification. In accordance with the City of Carlsbad's GMP, the Intersection Capacity Utilization (ICU) methodology was used to analyze existing conditions for each study intersection and the 2000 Highway Capacity Manual (2000 HCM) methodology was used for all future intersection conditions (Transportation Resource Board 2000). Per the City of Oceanside's adopted policy, the 2000 HCM methodology was used for analysis of both existing and future conditions for intersections located in the City of Oceanside. Analysis of Horizon Year (2030) conditions assumes that the proposed roadway improvements in the City of Carlsbad and City of Oceanside General Plan Circulation Elements are implemented by the year 2030. The Level of Service Methodology section found in Chapter 1, *Introduction*, of the Transportation Study fully describes the methodology used to evaluate potential project traffic impacts. Levels of service (LOS) categories range from excellent, nearly free-flow traffic at LOS A to stop-and-go conditions at LOS F. LOS D is considered an acceptable LOS for the City of Carlsbad and City of Oceanside.

4.12.1 Environmental Setting

This section of the report evaluates existing average daily traffic (ADT) volumes on study area street segments (between intersections) and at intersections during morning and afternoon peak hours. The study area for the traffic analysis includes a geographic area of approximately 2.1 miles (north-south) by 1.8 miles (east-west). This approximately 3.8 square-mile study area was established in consultation with the City of Carlsbad and City of Oceanside staff and by reviewing travel patterns and the potential impacts of project traffic. The traffic study area is

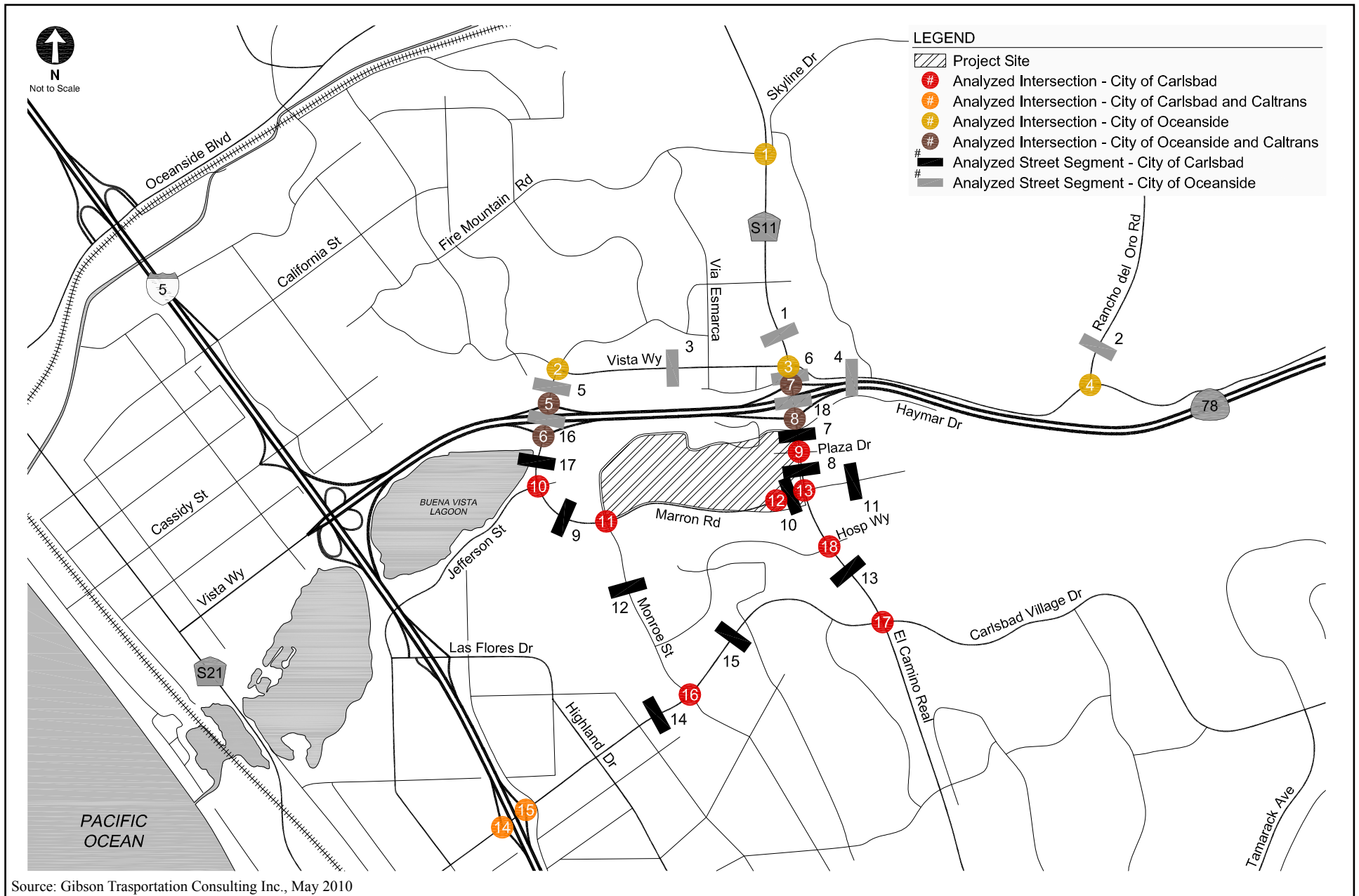
bounded by Fire Mountain Road/Skyline Drive on the north, Carlsbad Village Drive on the south, Rancho del Oro Road on the east, and Interstate-5 (I-5) on the west. Figure 4.12-1, *Project Study Area Circulation System*, depicts the street segments and intersections analyzed in the Transportation Study.

Daily roadway traffic counts and peak period manual traffic counts were conducted in September 2009 at study area street segments and intersections, respectively. A subsequent review of March and July 2010 traffic counts at seven of the key intersections revealed that overall traffic has declined, as well as during the peak hours (refer to Appendix I of the Transportation Study). Therefore, the 2009 counts are used in the Transportation Study as a worst-case scenario for the impact analysis. As discussed in Chapter 3.0, *Project Description*, Westfield Carlsbad currently has vacant leasable space beyond the regular amount expected in super regional shopping centers, mainly the 148,159 sf Robinson's-May building. Since this space is currently vacant, traffic from this space is not included in the traffic counts conducted at the analyzed intersections and street segments. However, for the purposes of determining the Existing Baseline conditions pursuant to CEQA Guidelines Section 15125, trips attributable to that currently unoccupied space were added to the baseline conditions counted in the project area as noted below.

Trip generation rates and estimates for the vacant Robinson's-May building were estimated using those identified in the San Diego Association of Government's (SANDAG's) *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG 2002) for a "Super Regional Shopping Center" land use. These estimates are conservative in that they do not account for trip reductions from pass-by trips. Based on the rate, the vacant Robinson's-May building could generate a total of 5,186 daily trips on a typical weekday, including approximately 207 morning peak hour trips (145 inbound, 62 outbound) and 519 afternoon peak hour trips (260 inbound, 259 outbound). These modified traffic volumes were added to the existing traffic counts collected in the project area and represent the Existing Baseline conditions for the purposes of this study. Appendix F provides a detailed description of the methodology used to establish the Existing Baseline condition.

Existing Street System

The existing street system in the traffic study area consists of a regional roadway system that includes freeways, prime and major arterials, secondary arterials and collectors, and sub-collector streets. The prime, major, and secondary arterials; collectors; and selected local streets



Source: Gibson Transportation Consulting Inc., May 2010

I:\ArcGIS\CRB-03 PlazaCaminoReal\Map\ENV\EIR\Fig4_12-1_ProjectStudyArea.indd -EV

Project Study Area Circulation System

WESTFIELD CARLSBAD

Figure 4.12-1

in the study area offer sub-regional and local access and circulation opportunities. These transportation facilities generally provide four to six travel lanes.

Primary regional access to the SP area is provided by I-5 and SR-78. The SP area is approximately 500 feet south of SR-78, which runs east-west, and 0.75 mile west of I-5, which runs generally north-south. SR-78 connects with Interstate 15 (I-15), which runs generally north-south, approximately 15 miles east of the SP area. I-5 connects with SR-56, which runs generally east-west, approximately 18 miles south of the SP area, and Interstate 805 (I-805), which runs generally north-south, approximately 20 miles south of the SP area.

Primary sub-regional and local access to the SP area is provided by a network of streets including El Camino Real, Vista Way, Jefferson Street, Carlsbad Village Drive, Monroe Street, and Marron Road. The following provides a brief description of the streets in the vicinity of the SP area:

- *El Camino Real* – El Camino Real is a six-lane Prime Arterial that runs north-south within the traffic study area with a full-access interchange to SR-78 north of the SP area. El Camino Real has bike lanes on both side of the street within the study area except on the segment from Vista Way to Plaza Drive. Parking is not allowed on both sides of the street in the study area.
- *Vista Way* – Vista Way is a four-lane Secondary Arterial that runs east-west within the traffic study area. Parking is not allowed on both sides of the street in the study area.
- *Jefferson Street* – Jefferson Street is a four-lane north-south roadway within the traffic study area with a full-access interchange to SR-78 north of the SP area. It is classified a Secondary Arterial from Vista Way/Ivy Road to SR-78, a Major Arterial from SR-78 to Marron Road, and a Secondary Arterial/Collector Street from SR-78 to Pine Avenue. Parking is not allowed on both sides of the street in the study area.
- *Carlsbad Village Drive* – Carlsbad Village Drive is a four-lane east-west roadway with a full-access interchange to I-5 south of the project site. It is classified a Secondary Arterial from College Boulevard to the I-5 northbound ramps, and a Major Arterial from the I-5 northbound ramps to Ocean Street. Carlsbad Village Drive has bike lanes on both sides of the street from College Boulevard to Highland Drive. Parking is not allowed on both sides of the street in the study area.

- *Monroe Street* – Monroe Street is a north-south roadway within the traffic study area that extends from Marron Road in the north to Gayle Way/Lance Way in the south. It is classified as a four-lane Collector Street from Marron Road to Carlsbad Village Drive and a two-lane Local Street from Carlsbad Village Drive to Gayle Way/Lance Way. Parking is not allowed on both sides of the street from Marron Road to Carlsbad Village Drive.
- *Marron Road* – Marron Road is east-west, four-lane Secondary Arterial that extends from Jefferson Street to east of Avenida de Anita within the traffic study area. Marron Road has bike lanes on both sides of the street from Jefferson Street to El Camino Real. Parking is not allowed on both sides of the street in the study area.

Transit Service

Both bus and rail transit service are available as part of the public transit system in the immediate vicinity of the project site. The transit service is provided by the North County Transit District (NCTD). Figure 8 in the Transportation Study illustrates the existing transit service within the study area. The following provides a brief description of the bus and rail lines providing service in the vicinity of Westfield Carlsbad shopping center:

- *NCTD 101* – Route 101 is a local line that travels from the Oceanside Transit Center to the University Towne Center in La Jolla, with average headways of 30 minutes during the weekday morning and afternoon peak hours. This line provides service to the Del Mar Fairgrounds and Racetrack, University of California at San Diego, Birch Aquarium, and Torrey Pines State Reserve. It travels along Carlsbad Boulevard in the vicinity of the project site.
- *NCTD 302* – Route 302 is a local line that travels from North County Square in Vista to the Oceanside Transit Center, with average headways of 30 minutes during the weekday morning peak and afternoon peak hours. This line provides service to the Tri-City Medical Center, Mira Costa College, and Westfield Carlsbad. It travels along Marron Road, Vista Way, Rancho del Oro Road, SR-78, and El Camino Real in the vicinity of the project site with a stop at the Westfield Carlsbad Transit Center.
- *NCTD 309* – Route 309 is a local line that travels from Oceanside to Encinitas, with average headways of 30 minutes during the weekday morning and afternoon peak hours. It travels along Marron Road, Vista Way, and El Camino Real in the vicinity of the project site with a stop at the Westfield Carlsbad Transit Center.

- *NCTD 318* – Route 318 is a local line that travels from the Oceanside Transit Center to the Rancho del Oro SPRINTER station, with average headways of one hour during the weekday morning and afternoon peak hours. It travels along Oceanside Boulevard in the vicinity of the project site.
- *NCTD 319* – Route 319 is a local line that travels from the Rancho del Oro SPRINTER station to the Quarry Creek station, with average headways of 30 minutes during the weekday morning and afternoon peak hours. This line provides service to the Tri-City Medical Center and Mira Costa College. It travels along Rancho del Oro Road in the vicinity of the project site.
- *NCTD 325* – Route 325 is a local line that travels from the Carlsbad Village station to Town Center North, with average headways of one hour during the weekday morning and afternoon peak hours. It travels along Marron Road, Monroe Street, Avenida de Anita, and Carlsbad Village Drive in the vicinity of the project site with a stop at the Westfield Carlsbad Transit Center.
- *NCTD COASTER* – COASTER service is a commuter rail line that travels from Oceanside to San Diego in the weekday morning and afternoon peak hours, with average headways of 33 minutes. It travels along the Pacific Ocean coastline in the vicinity of the project site.
- *NCTD SPRINTER* – SPRINTER service is a commuter rail line that travels from Oceanside to Escondido, with average headways of 30 minutes during the weekday morning and afternoon peak hours. It travels along the SR-78 corridor in the vicinity of the project site.

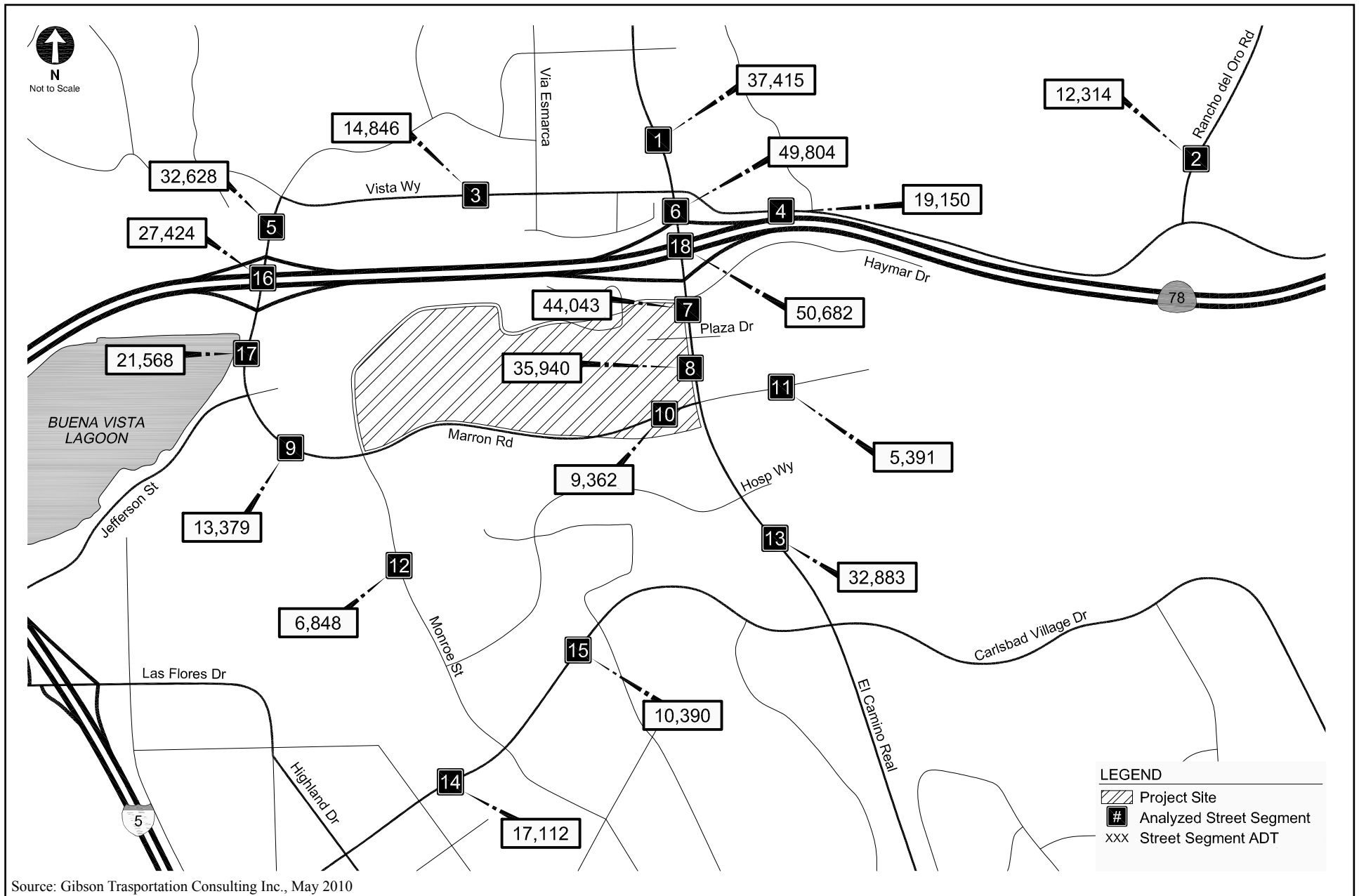
As mentioned above, NCTD Routes 302, 309, and 325 provide direct service to the project site with a stop at the Westfield Carlsbad Transit Center.

Street Segments

A total of 18 street segments within the traffic study area were selected for detailed analysis. Of the 18 study street segments, 10 are in the City of Carlsbad and eight are in the City of Oceanside. Table 4.12-1, *Existing Baseline (Year 2009) Street Segment Daily Levels of Service*, summarizes the existing baseline daily ADT volumes, volume-to-capacity (V/C) ratios, and LOS at the street segments within the traffic study area. Figure 4.12-2, *Existing Baseline (Year 2009)*

Street Segment Daily Traffic, shows the existing ADT for each street segment. Table 4.12-2, *Existing Baseline (Year 2009) Street Segment Peak Hour Levels of Service*, summarizes the existing baseline peak hour ADT volumes, V/C, and LOS at all street segments within the City of Carlsbad and two segments under City of Oceanside jurisdiction that currently operate at LOS D. Daily volume counts at 15 of the 18 street segments were collected in September 2009. Daily volumes at three of the 18 street segments were calculated by factoring the peak hour counts at intersections on either side of the segment using the ADT and peak hour counts at adjacent street segments and intersections, respectively. Peak hour traffic volumes for all analyzed street segments were calculated using the traffic volumes at the closest analyzed intersection. The existing ADT and peak hour counts for the analyzed street segments were modified to include trips from the vacant Robinson's-May building, as discussed above and in detail in Chapter 3, *Baseline Conditions*, of the Transportation Study (refer to Appendix F).

As shown in Table 4.12-1, all of the 18 analyzed street segments currently operate at acceptable levels of service (LOS D or better) for daily ADT under Existing Baseline conditions. The results of the peak hour analysis conducted for the study area street segments, as presented in Table 4.12-2, showed that all 10 segments in the City of Carlsbad operate at LOS D or better during both the morning and afternoon peak hours. However, both street segments in the City of Oceanside operate at LOS E or F during at least one of the analyzed peak hours under Existing Baseline conditions.



Existing Baseline (Year 2009) Street Segment Daily Traffic

WESTFIELD CARLSBAD

Figure 4.12-2

**Table 4.12-1
EXISTING BASELINE (YEAR 2009) STREET SEGMENT DAILY LEVELS OF SERVICE**

No.	Street Segment	Jurisdiction	Classification	Lanes	Capacity at LOS E	ADT	V/C	LOS
1	El Camino Real north of Vista Way	City of Oceanside	Prime Arterial	6	60,000	37,415	0.624	B
2	Rancho del Oro Road north of Vista Way	City of Oceanside	Secondary Arterial/Collector	4	45,000	12,314	0.274	A
3	Vista Way west of El Camino Real	City of Oceanside	Secondary Arterial/Collector	4	25,000	14,846	0.594	A
4	Vista Way east of El Camino Real	City of Oceanside	Secondary Arterial/Collector	4	25,000	19,150	0.766	C
5	Jefferson Street south of Vista Way	City of Oceanside	Major Arterial	6	50,000	32,628	0.653	B
6	El Camino Real south of Vista Way	City of Oceanside	Prime Arterial	6	60,000	49,804	0.830	D
7	El Camino Real north of Plaza Drive	City of Carlsbad	Prime Arterial	6	60,000	44,043	0.734	C
8	El Camino Real south of Plaza Drive	City of Carlsbad	Prime Arterial	6	60,000	35,940	0.599	C
9	Marron Road south of Jefferson Street	City of Carlsbad	Secondary Arterial/Collector	4	30,000	13,379	0.446	B
10	Marron Road west of El Camino Real	City of Carlsbad	Secondary Arterial/Collector	4	30,000	9,362	0.312	A
11	Marron Road east of El Camino Real	City of Carlsbad	Secondary Arterial/Collector	4	30,000	5,391	0.180	A
12	Monroe Street south of Marron Road	City of Carlsbad	Collector (no center lane) (continuous left-turn lane)	4	15,000	6,848	0.457	B
13	El Camino Real south of Marron Road	City of Carlsbad	Prime Arterial	6	60,000	32,883	0.548	B
14	Carlsbad Village Drive west of Monroe Street	City of Carlsbad	Secondary Arterial/Collector	4	30,000	17,112	0.570	C
15	Carlsbad Village Drive east of Monroe Street	City of Carlsbad	Secondary Arterial/Collector	4	30,000	10,390	0.346	B
16	Jefferson Street south of SR-78 Westbound Ramps	City of Oceanside	Major Arterial	6	50,000	27,424	0.548	A
17	Jefferson Street north of Marron Road	City of Carlsbad	Secondary Arterial/Collector	4	30,000	21,568	0.719	D
18	El Camino Real south of SR-78 Westbound Ramps	City of Oceanside	Prime Arterial	6	60,000	50,682	0.845	D

Source: Gibson 2012

**Table 4.12-2
EXISTING BASELINE (YEAR 2009) STREET SEGMENT PEAK HOUR LEVELS OF SERVICE**

City of Oceanside Street Segments ¹										
No.	Street Segment	Direction	Urban Street Class	A.M. Peak Hour			P.M. Peak Hour			
				Speed (mph)	LOS	Speed (mph)	LOS			
6	El Camino Real south of Vista Way	NB	II	21.00	D	12.33	F			
		SB		16.33	E	9.00	F			
18	El Camino Real south of SR-78 Westbound Ramps	NB	II	15.33	E	7.33	F			
		SB		13.00	F	18.00	D			
City of Carlsbad Street Segments ²										
No.	Street Segment	Direction	Lanes	Capacity ³	A.M. Peak Hour			P.M. Peak Hour		
					Volume	V/C	LOS	Volume	V/C	LOS
7	El Camino Real north of Plaza Drive	NB	3	5,400	836	0.155	A	1,660	0.307	A
		SB	3	5,400	1,305	0.242	A	1,491	0.276	A
8	El Camino Real south of Plaza Drive	NB	3	5,400	809	0.150	A	1,547	0.286	A
		SB	3	5,400	1,092	0.202	A	1,404	0.260	A
9	Marron Road south of Jefferson Street	NB	2	3,600	177	0.049	A	559	0.155	A
		SB	2	3,600	172	0.048	A	623	0.173	A
10	Marron Road west of El Camino Real	EB	2	3,600	114	0.032	A	492	0.137	A
		WB	2	3,600	162	0.045	A	461	0.128	A
11	Marron Road east of El Camino Real	EB	2	3,600	127	0.035	A	400	0.111	A
		WB	2	3,600	252	0.070	A	373	0.104	A
12	Monroe Street south of Marron Road	NB	2	3,600	208	0.058	A	309	0.086	A
		SB	2	3,600	145	0.040	A	359	0.100	A
13	El Camino Real south of Marron Road	NB	3	5,400	948	0.176	A	1,438	0.266	A
		SB	3	5,400	1,099	0.204	A	1,124	0.208	A
14	Carlsbad Village Drive west of Monroe Street	EB	2	3,600	360	0.100	A	761	0.211	A
		WB	2	3,600	783	0.218	A	565	0.157	A
15	Carlsbad Village Drive east of Monroe Street	EB	2	3,600	277	0.077	A	513	0.143	A
		WB	2	3,600	545	0.151	A	391	0.109	A
17	Jefferson Street north of Marron Road	NB	2	3,600	201	0.056	A	897	0.249	A
		SB	2	3,600	578	0.161	A	882	0.245	A

¹ Street segment peak hour LOS analysis based on City of Oceanside's methodology.

² Street segment peak hour LOS analysis based on City of Carlsbad's methodology.

³ Assumes a capacity of 1,800 vehicles per hour per lane.

Source: Gibson 2012

Intersections

A total of 18 intersections within the traffic study area were selected for detailed analysis. Of the 18 study intersections, 10 are in the City of Carlsbad and eight are in the City of Oceanside. Two of the 10 study intersections in the City of Carlsbad and four of the eight study intersections in the City of Oceanside are freeway ramp locations and, thus, also fall under Caltrans jurisdiction. Existing Baseline conditions were analyzed using both ICU and 2000 HCM methodology to fulfill the requirements of the cities of Carlsbad and Oceanside. Intersection fieldwork (signal phasing and lane configurations) was performed at all of the analyzed intersections in August 2009. Intersection turning movement counts for typical weekday morning (6:15 a.m. to 9:00 a.m.) and afternoon (3:45 p.m. to 6:30 p.m.) peak periods at 17 of the 18 study intersections were collected in September 2009. Turning movement counts at one of the 18 intersections were conducted in March 2010. The existing traffic counts conducted at the analyzed intersections were modified to include trips from the vacant Robinson's-May building, as discussed above and in detail in Chapter 3 of the Transportation Study (refer to Appendix F).

Figures 4.12-3a and 4.12-3b, *Existing Baseline (Year 2009) Intersection Peak Hour Traffic*, show existing weekday morning and afternoon peak hour traffic volumes at the analyzed intersections within the study area. Table 4.12-3, *Existing Baseline (Year 2009) Intersection Peak Hour Levels of Service*, includes the results of the peak hour LOS analysis using the ICU method for the Existing Baseline conditions of intersections located within Carlsbad. The table summarizes the existing peak hour V/C ratios and corresponding LOS at each analyzed intersection. As shown in Table 4.12-3, all of the 18 analyzed intersections are shown to be operating at acceptable levels of service (LOS D or better) for Existing Baseline conditions.

Table 4.12-3 EXISTING BASELINE (YEAR 2009) INTERSECTION PEAK HOUR LEVELS OF SERVICE						
No.	Intersection	Jurisdiction	AM Peak Hour		PM Peak Hour	
			V/C or Delay (sec)	LOS*	V/C or Delay (sec)	LOS*
1	El Camino Real at Fire Mountain Drive/Skyline Drive	City of Oceanside	10.1	B	11.2	B
2	Jefferson Street/Ivy Road at Vista Way/Ivy Road	City of Oceanside	27.0	C	29.9	C
3	El Camino Real at Vista Way	City of Oceanside	20.1	B	39.4	D
4	Rancho del Oro Road at Vista Way	City of Oceanside	24.6	C	26.1	C

**Table 4.12-3 (cont.)
EXISTING BASELINE (YEAR 2009)
INTERSECTION PEAK HOUR LEVELS OF SERVICE**

No.	Intersection	Jurisdiction	AM Peak Hour		PM Peak Hour	
			V/C or Delay (sec)	LOS*	V/C or Delay (sec)	LOS*
5	Jefferson Street at SR-78 Westbound Ramps	City of Oceanside/Caltrans	18.9	B	23.1	C
6	Jefferson Street at SR-78 Eastbound Ramps	City of Oceanside/Caltrans	17.0	B	21.9	C
7	El Camino Real at SR-78 Westbound Ramps	City of Oceanside/Caltrans	15.5	B	28.1	C
8	El Camino Real at SR-78 Eastbound Ramps	City of Oceanside/Caltrans	21.6	C	24.9	C
9	El Camino Real at Plaza Drive	City of Carlsbad	0.315	A	0.581	A
10	Jefferson Street/Marron Road at Jefferson Street	City of Carlsbad	0.357	A	0.549	A
11	Monroe Street at Marron Road	City of Carlsbad	0.243	A	0.416	A
12	Project Driveway at Marron Road	City of Carlsbad	0.176	A	0.310	A
13	El Camino Real at Marron Road	City of Carlsbad	0.375	A	0.666	B
14	I-5 Southbound Ramps at Carlsbad Village Drive	City of Carlsbad/Caltrans	0.488	A	0.658	A
15	I-5 Northbound Ramps at Carlsbad Village Drive	City of Carlsbad/Caltrans	0.561	A	0.680	B
16	Monroe Street at Carlsbad Village Drive	City of Carlsbad	0.450	A	0.392	A
17	El Camino Real at Carlsbad Village Drive	City of Carlsbad	0.489	A	0.526	A
18	El Camino Real at Hosp Way	City of Carlsbad	0.346	A	0.461	A

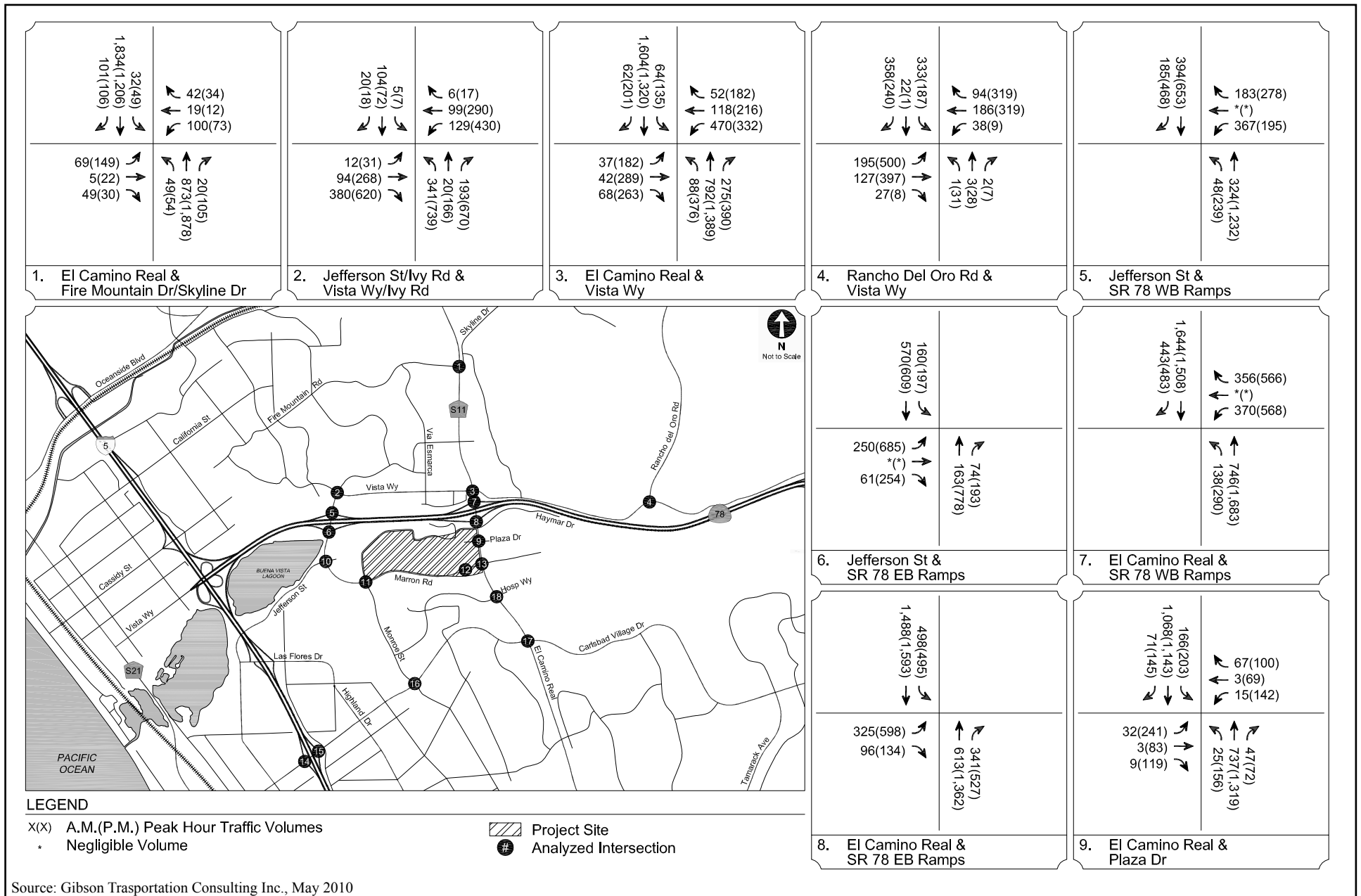
* LOS Analysis based on ICU methodology for City of Carlsbad intersections and 2000 HCM methodology for City of Oceanside intersections.

Source: Gibson 2012

4.12.2 Thresholds for Determining Significance

The City of Carlsbad's criteria for intersection and street segment impact analyses, based on those found in Appendix G of CEQA and in the SANTEC/ITE Guidelines, state that a significant impact would occur if one of the following five criteria is met:

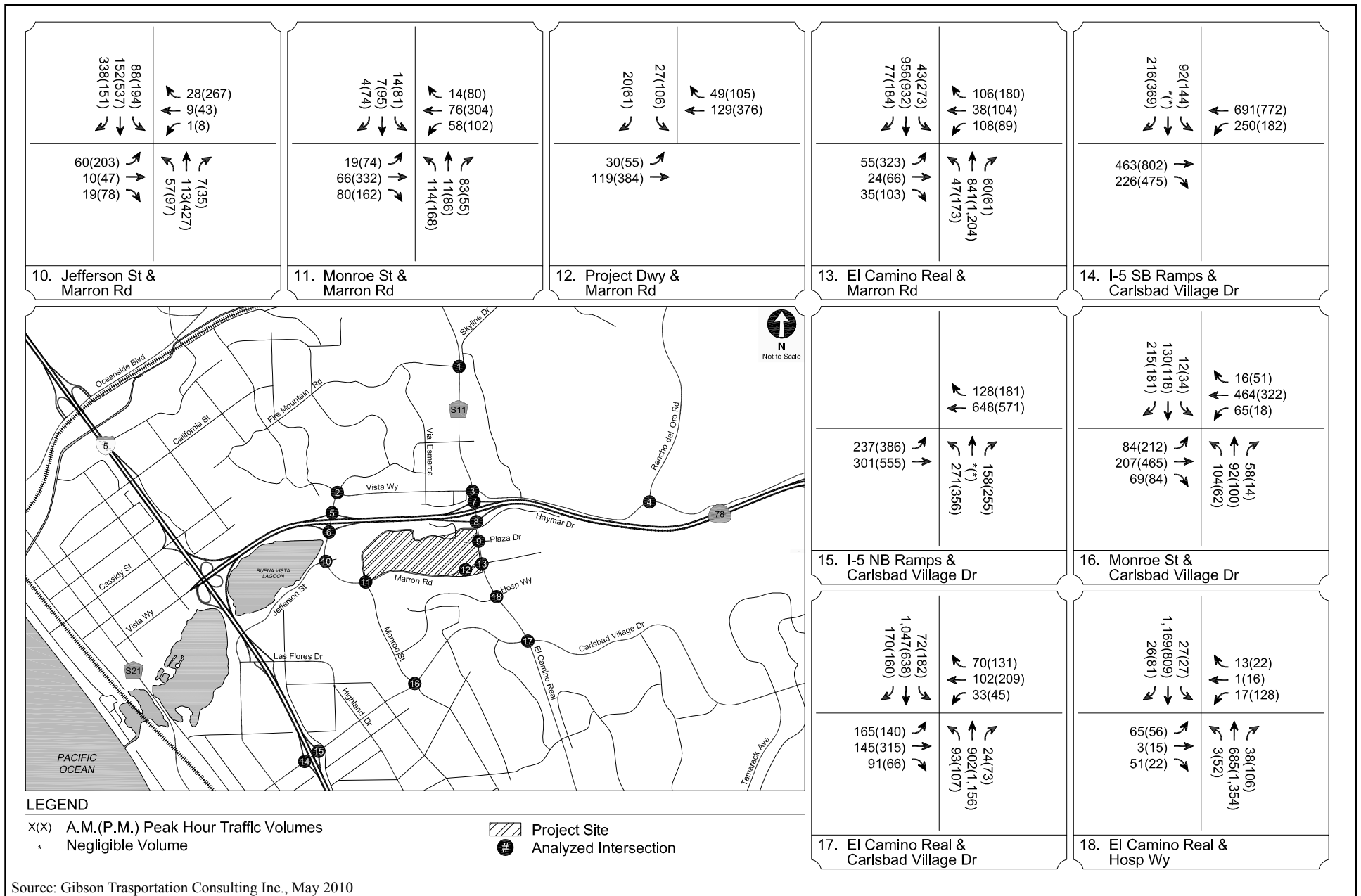
- The proposed project would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit;
- The proposed project would conflict with applicable policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks);



Existing Baseline (Year 2009) Intersection Peak Hour Traffic

WESTFIELD CARLSBAD

Figure 4.12-3a



- The proposed project would conflict with an applicable congestion management plan and/or have a cumulatively considerable contribution to a cumulative transportation or traffic impact considering past, present, and probable future projects;
- The addition of trips generated by the proposed land use results in a change in operating conditions from acceptable (LOS D or better) to deficient (LOS E or F);
- When an intersection or roadway segment is operating at deficient levels, the addition of trips generated by the proposed land use results in a change in V/C ratio of more than 2 percent (0.02) when compared to the no-build condition evaluated using the ICU methodology. For future year scenarios, an increase in delay of more than 2.0 seconds at a deficient intersection, as determined using the 2000 HCM methodology, results in a significant impact; or

Based on the City of Carlsbad Growth Management Guidelines, a significant impact would occur within Carlsbad if the proposed project would:

- Cause road segment(s) or intersection(s) in the Local Facilities Management Zone (LFM) Zone or similar facilities outside the LFMP Zone to exceed a LOS C during off-peak hours or a LOS D during peak hours, as stated in the Local Facilities Management Plan.

Since congestion is generally experienced during peak hours, traffic studies like the Gibson Transportation Study are focused to analyze the peak hour scenarios in order to capture the worst-case traffic conditions.

The significance of project impacts on City of Oceanside intersections and segments would be determined using the threshold criteria adopted by the City of Oceanside. The criteria state that a significant impact would occur at an analyzed intersection if one of the following two criteria is met:

- The addition of trips generated by the proposed land use results in a change in operating conditions from acceptable (LOS D or better) to deficient (LOS E or F); or
- When an intersection is operating at deficient levels of service (LOS E or F), an increase in delay of more than 2.0 seconds at the intersection, as determined using the 2000 HCM methodology, results in a significant impact under both baseline and future conditions.

The City of Oceanside's criteria state that a significant impact would occur at an analyzed street segment if one of the following two criteria is met:

- The addition of trips generated by the proposed land use results in a change in daily operating conditions from acceptable (LOS C or better) to deficient (LOS D, E, or F), or when a street segment is operating at deficient levels of service (LOS D, E, or F), an increase in V/C of more than 0.02 at the segment results in a significant impact under both baseline and future conditions; and
- Peak hour analysis must be conducted for all analyzed street segments projected to operate at a daily LOS of D, E, or F. Daily impacts are not considered significant if a peak hour arterial LOS of D or better can be demonstrated. Peak hour roadway segment LOS is measured in terms of speed. A decrease in speed of more than 1.0 mile per hour (mph) at a peak hour LOS of E or F results in a significant impact.

4.12.3 Environmental Impact

Future Roadway Improvements, Traffic Projections, and Methodology

Base Roadway Improvements

The City of Carlsbad and City of Oceanside's General Plan Circulation Elements identify future roadway improvements within the study area that would affect the traffic projections and traffic patterns in the study area. The roadway improvements identified within and in the vicinity of the study area are discussed below (refer to Figure 25 of the Transportation Study [Appendix F] for a graphical representation of the improvements).

1. *Marron Road extension* – In the vicinity of the SP area, Marron Road currently extends westerly from its intersection with Jefferson Street to approximately 200 feet east of its intersection with Avenida de Anita. Another section of Marron Road extends between its intersection with Lake Boulevard and 1,500 feet west of it. The proposed roadway improvement project would connect these two sections and provide a continuous four-lane Secondary Arterial between Jefferson Street and Lake Boulevard.
2. *Cannon Road extension* – Cannon Road currently extends westerly from its intersection with Carlsbad Boulevard to its intersection with College Boulevard. Another section of Cannon Road extends from approximately 1,000 feet west of its intersection with

Mystra Way/Leisure Village Way to approximately 500 feet east of its intersection with Melrose Drive. The proposed roadway improvement project would connect these two sections and provide a continuous four-lane Major Arterial.

3. *SR-78 interchange at Rancho del Oro Road and extension of Rancho del Oro Road to the Marron Road extension* – Rancho del Oro Road currently extends southerly from its intersection with Mission Road to its intersection with Vista Way. The proposed roadway improvement project would extend Rancho del Oro Road south of Vista Way and connect it to the Marron Road extension described above. The improvement also proposes to construct a diamond interchange at Rancho del Oro Road to the SR-78 freeway just south of its intersection with Vista Way.
4. *I-5 North Coast* – The I-5 North Coast project extends from La Jolla Village Drive to Vandegrift Boulevard. As part of the project, new High Occupancy Vehicle (HOV)/Express Lanes for transit and carpools will be added from La Jolla Village Drive to Vandegrift Boulevard. Operational improvements such as auxiliary lanes and local freeway interchange modifications also would be added incrementally at key locations to improve traffic flow. The portion of this improvement is nearly funded.
5. *SR-78 HOV Lanes and Interchange Improvements at I-5* – This improvement project would add new HOV/Express Lanes for transit and carpools along the SR-78 from I-15 to I-5. The improvement also would complete the SR-78 interchange with I-5.

Since the base roadway improvements discussed above would introduce additional/new travel lanes (i.e., adding roadway capacities) to various freeways, streets, and intersections, the SANDAG forecast model discussed below analyzes shifts in both existing and future traffic from adjacent roadways to these improved facilities. For example, additional capacity added to one roadway corridor could cause vehicles to shift from a parallel facility. These shifts are reflected in the traffic projections provided by the SANDAG model and are used in this analysis.

Due to the anticipated construction schedule of these improvements, it was assumed that only the I-5 HOV lanes south of SR-78 (I-5 North Coast Project) would be implemented by the year 2020 and, therefore, the Near Term (Year 2020) analysis does not account for any of the other improvements represented above. However, the Horizon Year (Year 2030) analysis assumes that all of the above roadway improvement projects would be completed by the year 2030.

It should be noted that the project Transportation Study evaluated two additional Horizon Year scenarios wherein not all of the planned circulation element improvements described above would be implemented (refer to Table 4 in Appendix F for a summary of the analyzed scenarios). For instance, the study looked at potential long-term impacts if the following roadway improvements were not implemented: 1) Marron Road extension and the Rancho Del Oro interchange with SR-78 and 2) Cannon Road extension and the Rancho Del Oro interchange with SR-78. Although these scenarios are presented in the Transportation Study, they were provided for information purposes only and not the basis for the impact analysis and mitigation planning for the proposed project since all the assumed improvements are currently contained in the planned circulation elements for the cities of Carlsbad and Oceanside and occur in the long-term forecasts for the project area. Refer to Appendix F to this report for the results of these additional Horizon Year conditions.

Forecast Model

The future traffic volumes for the study intersections and street segments analyzed for Near Term (Year 2020) and Horizon Year (Year 2030) conditions were developed using traffic projections from SANDAG. The SANDAG Series 10 North County Sub-Area Model was used for this analysis. While the computer travel forecasts include traffic projections from the fully-occupied existing land uses in the SP area (including the currently vacant Robinson's-May building), they do not include the commercial development proposed under the SP or current SDP proposal. As such, the project-only traffic volumes were added to the model traffic projections to develop future plus project traffic forecasts. The process used to obtain future traffic projects from the SANDAG model is explained in detail in Chapter 4, *Future Conditions*, of the Transportation Study, included as Appendix F of this EIR.

Street Segment Level of Service Procedures

The daily street segment analysis for City of Carlsbad street segments is based on the capacity thresholds identified in the SANTEC/ITE Guidelines, per the City of Carlsbad's Growth Management Plan (GMP) criterion for levels of service determination on street segments between intersections. As required by the City of Carlsbad's GMP, segments under the City of Carlsbad jurisdiction also were analyzed for peak hour operations. Peak hour LOS values were determined by dividing directional traffic volumes at each street segment by the segment's peak hour capacity for the V/C ratio, using 1,800 VPHPL as the capacity per lane.

The daily street segment analysis for street segments in the City of Oceanside is based on thresholds identified in the City of Oceanside's Circulation Element. The City of Oceanside's standard for an acceptable LOS for daily street segment operations is LOS C. Any street segments projected to operate at LOS D or worse were analyzed for morning and afternoon peak hours using the 2000 HCM arterial analysis methodology, as described in detail in Chapter 1, *Introduction*, of the Transportation Study (Appendix F).

Intersection Level of Service Procedures

The LOS analysis for Existing Baseline Plus Project conditions within the City of Carlsbad was performed using the ICU method, since that method is required for the existing conditions evaluation in the latest City of Carlsbad GMP traffic monitoring report (2007). For Near Term (Year 2020) and Horizon Year (Year 2030) conditions, all study intersections located within Carlsbad were evaluated using the 2000 HCM methodology. Intersections within the City of Oceanside were evaluated using the 2000 HCM methodology for all scenarios.

Intersecting Lane Volume Procedures

Due to the project's proximity to the I-5 and SR-78 freeways, both of which are state-owned facilities and operated by the California Department of Transportation (Caltrans), an additional evaluation of freeway ramp intersection locations is required per the Intersecting Lane Volume (ILV) methodology described in the *Caltrans Highway Design Manual* (Caltrans 2008). The ILV methodology is based on the concept that the capacity of intersecting lanes of traffic is 1,500 vehicles per hour. For the typical local street interchange, there is usually a critical intersection of a ramp and the crossroads that establishes the capacity of the interchange.

Neither the City of Carlsbad nor Caltrans consider the ILV methodology as an approved methodology for determining significance of impacts under CEQA. ILV methodology is basic, and does not allow for the sophisticated analysis that the 2000 HCM methodology does. In some cases, ILV results will vary dramatically from HCM results. However, the local Caltrans District 11 requests that ILV analyses be included for informational purposes. Table 4.12-4, *Caltrans ILV Operational Thresholds*, summarizes the three ILV capacities.

**Table 4.12-4
CALTRANS ILV OPERATIONAL THRESHOLDS**

ILV / Hour	Operating Condition	Definition
< 1,200	Stable	Stable flow with slight, but acceptable delay. Occasional signal loading may develop. Free midblock operations.
$\geq 1,200$ and $\leq 1,500$	Unstable	Unstable flow with considerable delays possible. Some vehicles occasionally wait two or more cycles to pass through the intersection. Continuous backup occurs on some approaches.
> 1,500	Capacity	Stop-and-go operation with severe delay and heavy congestion. Traffic volume is limited by maximum discharge rates of each phase. Continuous backup in varying degrees occurs on all approaches. Where downstream capacity is restrictive, mainline congestion can impede orderly discharge through the intersection.

Source: *Caltrans Highway Design Manual*, Caltrans 2008.

Project Trip Generation

As summarized in Table 4.12-5, *Project Trip Generation Estimates*, the project is expected to generate a total of 1,240 net new daily trips on a typical weekday, including approximately 49 morning peak hour trips (35 inbound, 14 outbound) and 124 afternoon peak hour trips (62 inbound, 62 outbound).

**Table 4.12-5
PROJECT TRIP GENERATION ESTIMATES**

Land Use	Size (GLA sf)	Daily	A.M. Peak Hour			P.M. Peak Hour		
			In	Out	Total	In	Out	Total
<u>Existing</u> Super Regional Shopping Center	1,151,092	40,288	1,128	484	1,612	2,015	2,014	4,029
<u>Proposed</u> Super Regional Shopping Center	1,186,509	41,528	1,163	498	1,661	2,077	2,076	4,153
Total Net New Trips		1,240	35	14	49	62	62	124

Source: *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, SANDAG 2002

Source: Gibson 2012.

Project Trip Distribution

The project trip distribution applied for study area traffic is based on the traffic analysis results from the Series 10 North County Sub-Area Model. The project trip distributions from the model were used for the Existing Baseline Plus Project and Near Term (Year 2020) trip distribution percentages, as follows:

- 20 percent to/from the north;
- 26 percent to/from the south;
- 24 percent to/from the east;
- 11 percent to/from the west; and
- 19 percent trips within the local study area.

The following trip distribution percentages were used for the Horizon Year (Year 2030) analysis:

- 19 percent to/from the north;
- 23 percent to/from the south;
- 24 percent to/from the east;
- 8 percent to/from the west; and
- 26 percent trips within the local study area.

Project-only ADT volumes on study area street segments are depicted in Figure 4.12-4, *Project-only Street Segment Daily Traffic*, and project-only morning and afternoon peak hour volumes at study area intersections are shown in Figures 4.12-5a and 4.12-5b, *Project-only Intersection Peak Hour Traffic*.

Existing Plus Project Conditions

The following provides a description of existing traffic conditions with the addition of traffic generated under the proposed SP and current SDP proposal.

Street Segments

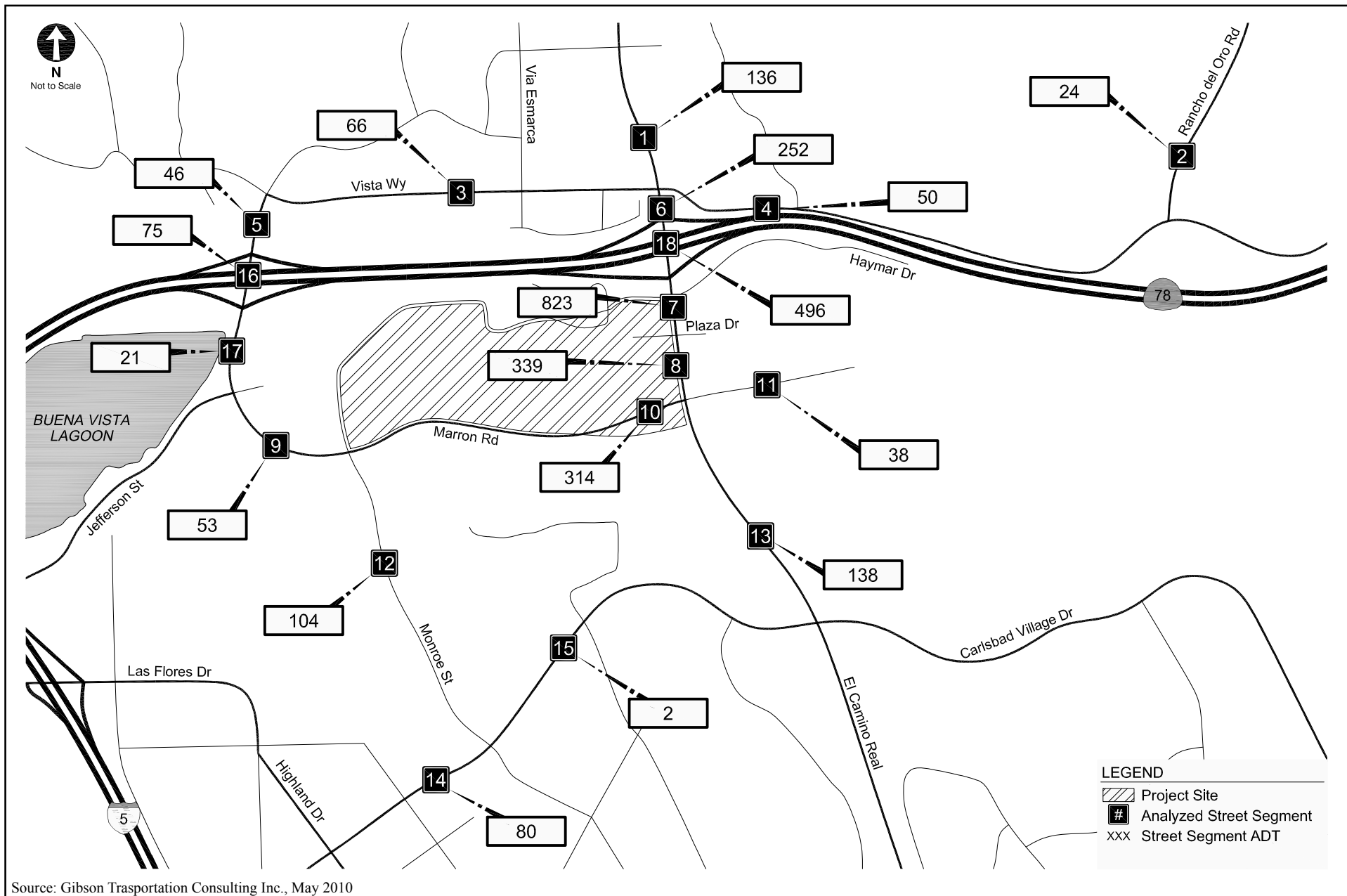
Table 4.12-6, *Existing Baseline Plus Project Street Segment Daily Levels of Service*, summarizes the traffic volumes, capacities, and LOS at the study area street segments. Figure 4.12-6, *Existing Baseline Plus Project Street Segment Daily Traffic*, graphically illustrates the Existing Baseline Plus Project ADT volumes at the analyzed street segments. As shown in Table 4.12-6,

all 18 of the analyzed street segments are projected to operate at LOS D or better under Existing Baseline Plus Project conditions. Similar to the Existing Baseline conditions, two segments in the City of Oceanside are projected to operate at LOS D. Since the City of Oceanside's standard for an acceptable LOS for daily street segment operations is LOS C, a peak hour analysis was conducted at the segments projected to operate at LOS D or worse. A peak hour analysis also was conducted for all analyzed street segments in the City of Carlsbad.

The results of the peak hour analysis show that all 10 street segments in the City of Carlsbad would operate at LOS D or better during both the morning and afternoon peak hours (refer to Tables 21 and 22 of the Transportation Study [Appendix F] for detailed street segment morning and afternoon peak hour analyses, respectively). The proposed SP and current SDP proposal would not result in an increase in V/C of 0.02 or more at any of the street segments in Carlsbad. Alternatively, the two analyzed street segments in the City of Oceanside, El Camino Real at Vista Way and El Camino Real south of the SR-78 westbound ramps, would operate at LOS E or F during at least one of the analyzed peak hours, below the City of Oceanside's standard for an acceptable LOS for peak hour street segment operations (LOS D). However, the project would not result in a decrease in speed of 1.0 mph or more in the City of Oceanside street segments projected to operate at LOS E or F during peak hours. While the project would result in a decrease in speed of 1.0 mph at northbound El Camino Real south of Vista Way during the morning peak hour, the segment is projected to operate at an acceptable LOS (i.e., LOS D). Therefore, the project would not result in direct significant peak hour impacts at any of the analyzed street segments during either peak hour.

Intersections

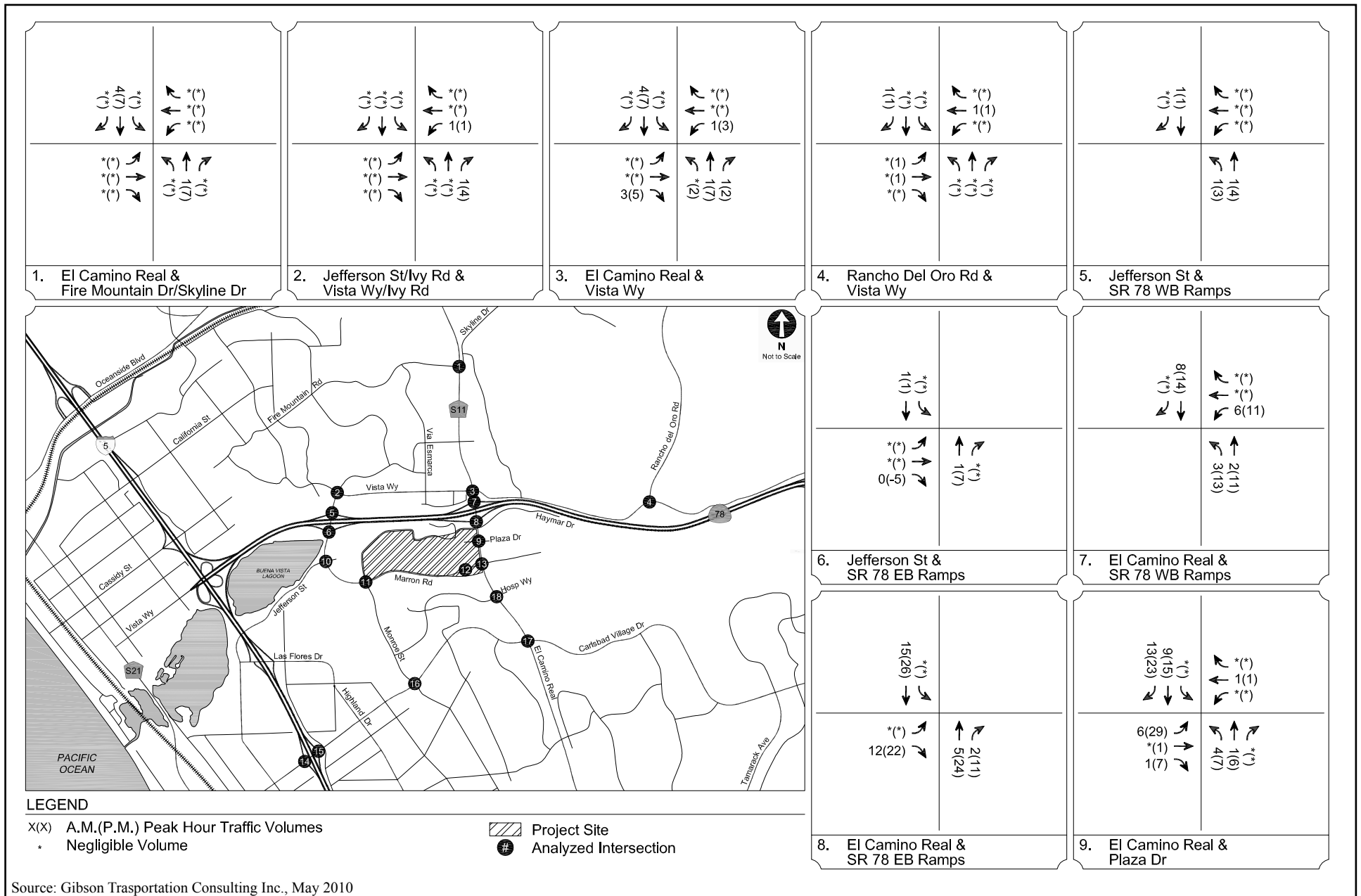
The projected Existing Baseline Plus Project intersection operating conditions for the weekday morning and afternoon peak hours are shown in Table 4.12-7 *Existing Baseline Plus Project Intersection Peak Hour Levels of Service*. Figures 4.12-7a and 4.12-7b, *Existing Baseline Plus Project Intersection Peak Hour Traffic*, graphically illustrate the Existing Baseline Plus Project ADT volumes at the analyzed intersections for the morning and afternoon peak hours. As shown in Table 4.12-7, all of the analyzed intersections are projected to operate at an acceptable LOS (i.e., LOS D or better) with relatively small increases in the V/C ratios and delay as a result of the project trips under the Existing Baseline Plus Project conditions. As such, the project would not add enough traffic to any of the 18 study intersections to result in a direct significant impact.



Project-only Street Segment Daily Traffic

WESTFIELD CARLSBAD

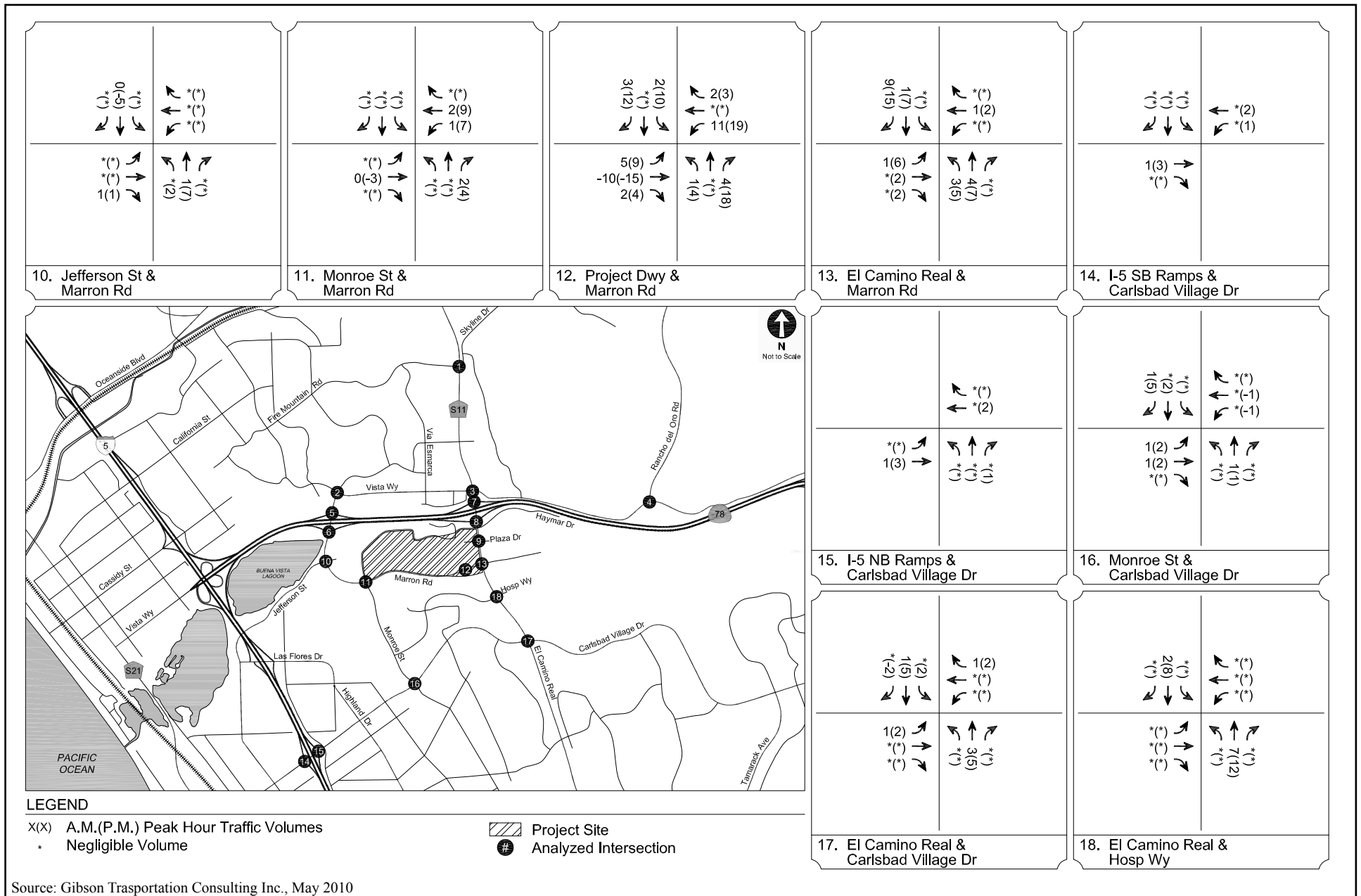
Figure 4.12-4

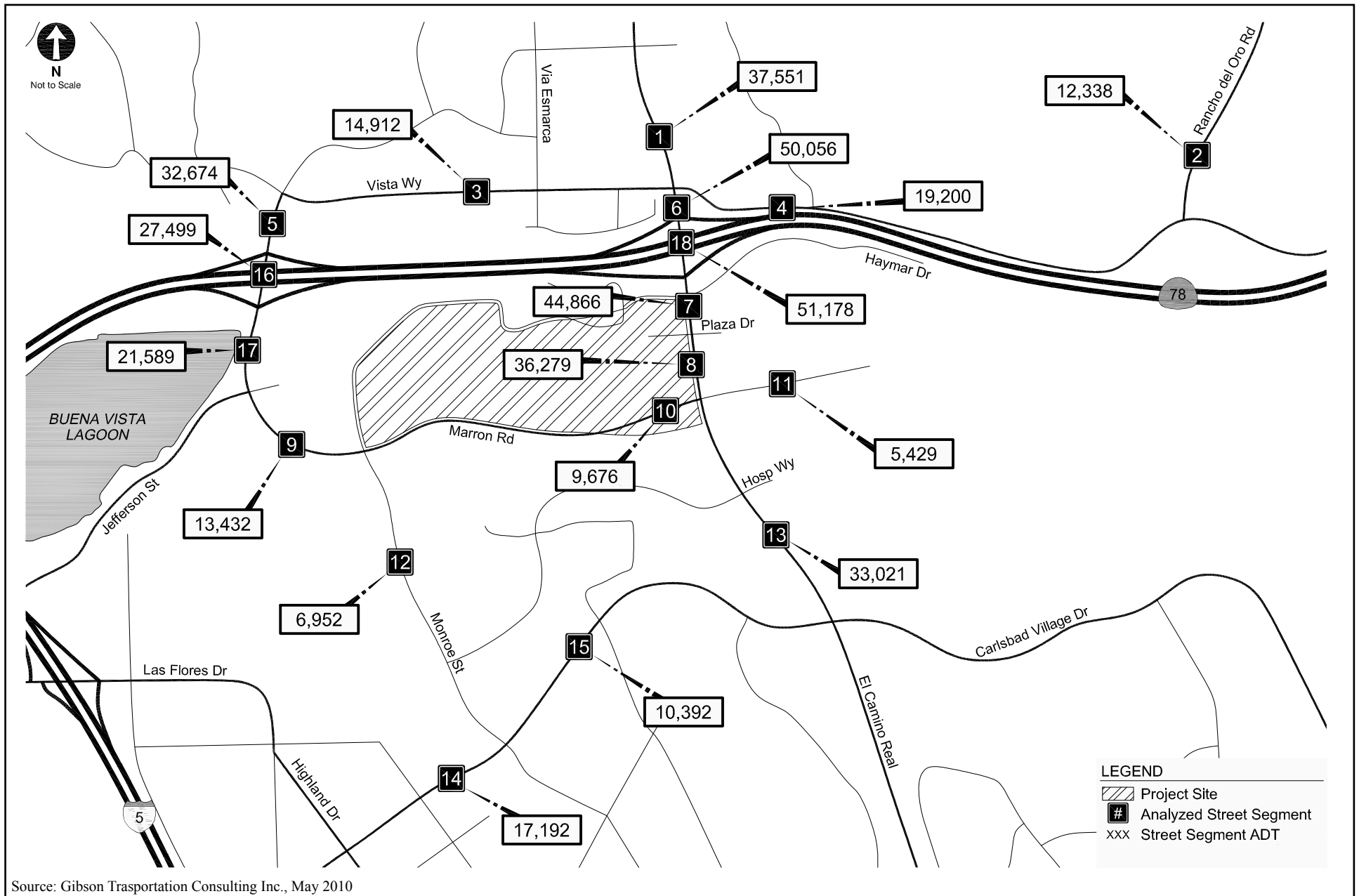


Project-only Intersection Peak Hour Traffic

WESTFIELD CARLSBAD

Figure 4.12-5a

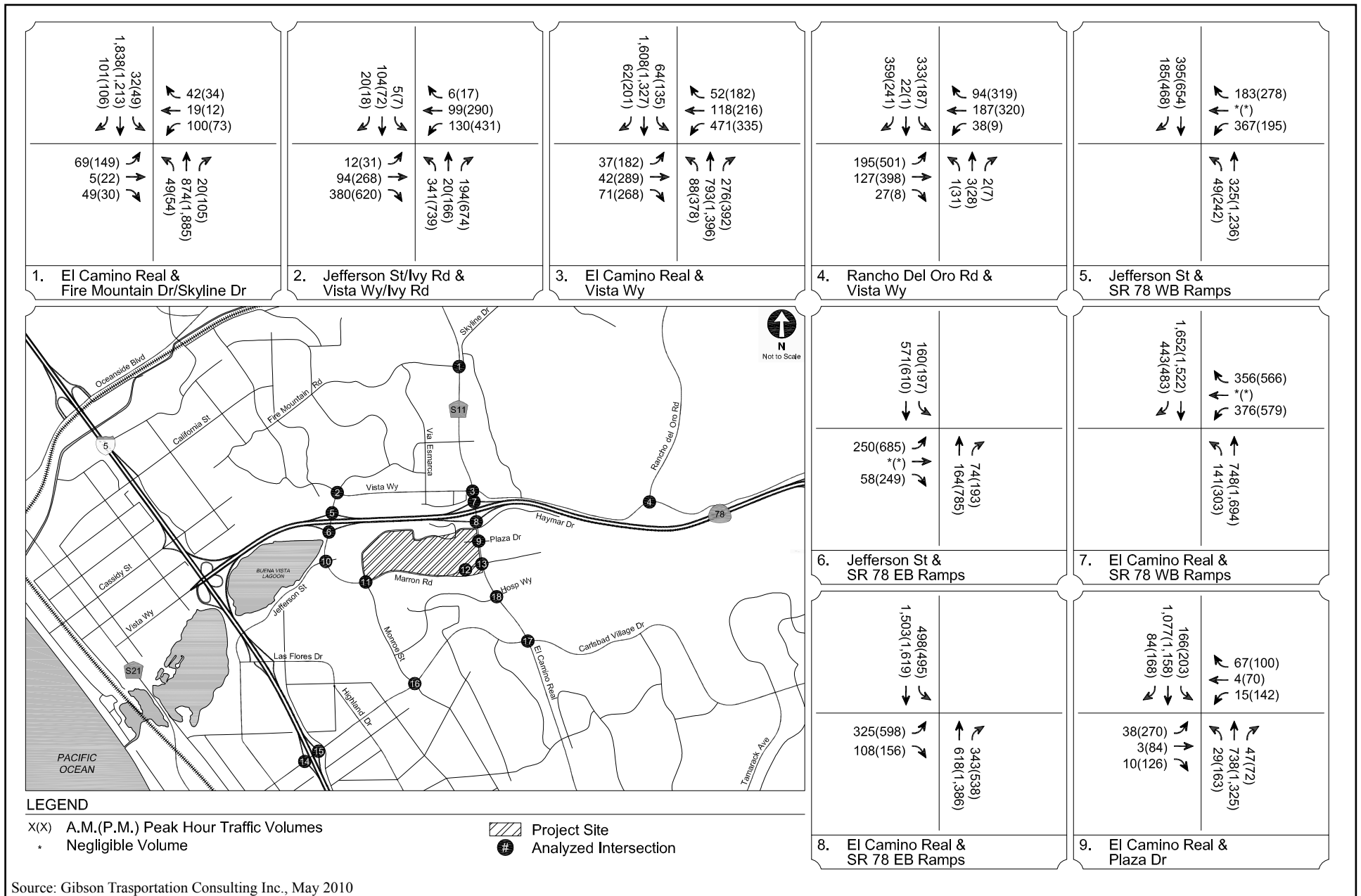




Existing Baseline Plus Project Street Segment Daily Traffic

WESTFIELD CARLSBAD

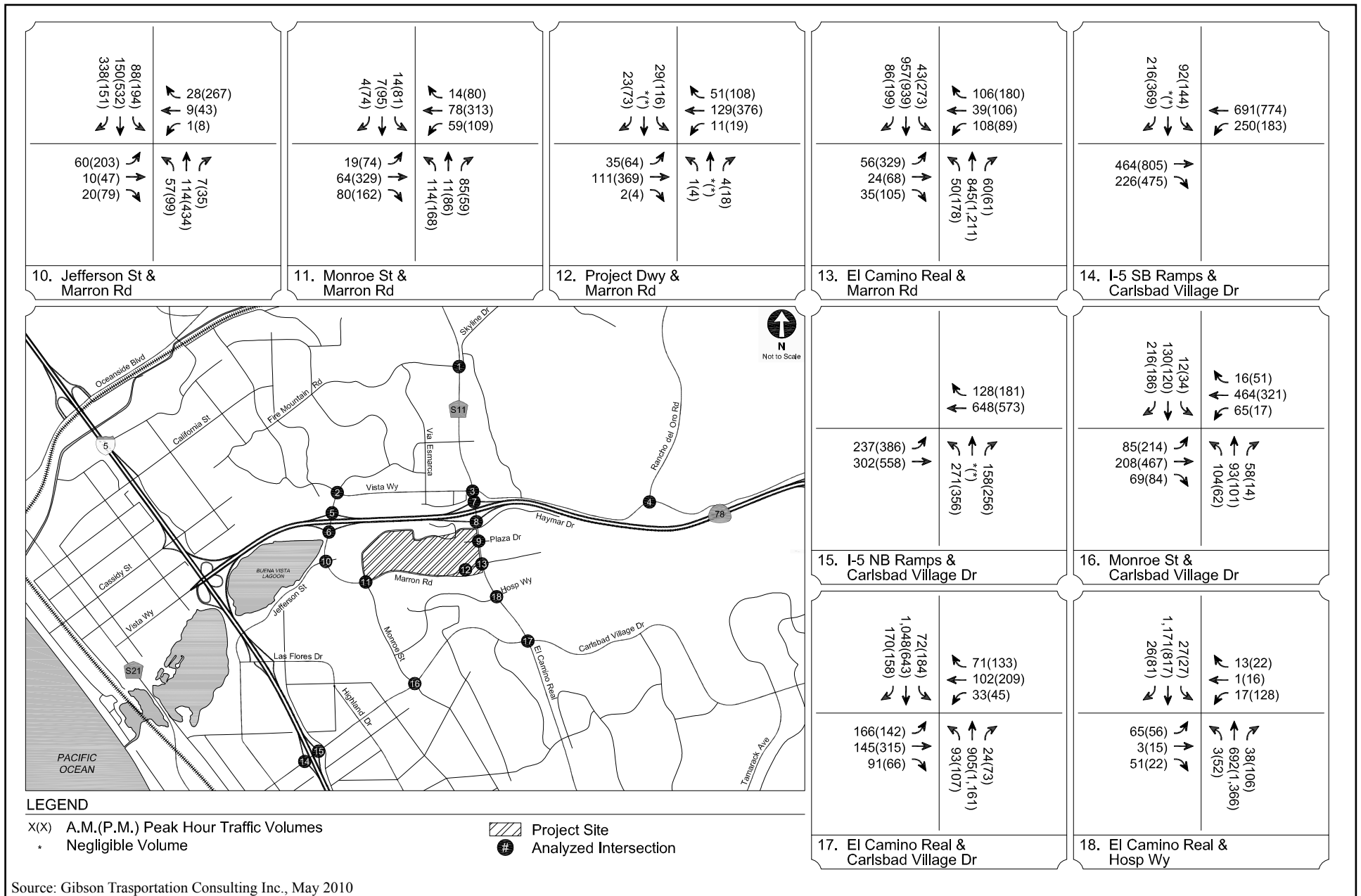
Figure 4.12-6



Existing Baseline Plus Project Intersection Peak Hour Traffic

WESTFIELD CARLSBAD

Figure 4.12-7a



Existing Baseline Plus Project Intersection Peak Hour Traffic

WESTFIELD CARLSBAD

Figure 4.12-7b

**Table 4.12-6
EXISTING BASELINE PLUS PROJECT
STREET SEGMENT DAILY LEVELS OF SERVICE**

No.	Street Segment	Jurisdiction*	Capacity at LOS E	Existing Baseline			Existing Baseline plus Project				
				ADT	V/C	LOS	ADT	V/C	LOS	Change in V/C	Sig. Impact?
1	El Camino Real north of Vista Way	City of Oceanside	60,000	37,415	0.624	B	37,551	0.626	B	0.002	NO
2	Rancho del Oro Road north of Vista Way	City of Oceanside	45,000	12,314	0.274	A	12,338	0.274	A	0.000	NO
3	Vista Way west of El Camino Real	City of Oceanside	25,000	14,846	0.594	A	14,912	0.596	A	0.002	NO
4	Vista Way east of El Camino Real	City of Oceanside	25,000	19,150	0.766	C	19,200	0.768	C	0.002	NO
5	Jefferson Street south of Vista Way	City of Oceanside	50,000	32,628	0.653	B	32,674	0.653	B	0.000	NO
6	El Camino Real south of Vista Way	City of Oceanside	60,000	49,804	0.830	D	50,056	0.834	D	0.004	NO
7	El Camino Real north of Plaza Drive	City of Carlsbad	60,000	44,043	0.734	C	44,866	0.748	C	0.014	NO
8	El Camino Real south of Plaza Drive	City of Carlsbad	60,000	35,940	0.599	C	36,279	0.605	C	0.006	NO
9	Marron Road south of Jefferson Street	City of Carlsbad	30,000	13,379	0.446	B	13,432	0.448	B	0.002	NO
10	Marron Road west of El Camino Real	City of Carlsbad	30,000	9,362	0.312	A	9,676	0.323	A	0.011	NO
11	Marron Road east of El Camino Real	City of Carlsbad	30,000	5,391	0.180	A	5,429	0.181	A	0.001	NO
12	Monroe Street south of Marron Road	City of Carlsbad	15,000	6,848	0.457	B	6,952	0.463	B	0.006	NO
13	El Camino Real south of Marron Road	City of Carlsbad	60,000	32,883	0.548	B	33,021	0.550	B	0.002	NO
14	Carlsbad Village Drive west of Monroe Street	City of Carlsbad	30,000	17,112	0.570	C	17,192	0.573	C	0.003	NO
15	Carlsbad Village Drive east of Monroe Street	City of Carlsbad	30,000	10,390	0.346	B	10,392	0.346	B	0.000	NO
16	Jefferson Street south of SR-78 WB Ramps	City of Oceanside	50,000	27,424	0.548	A	27,499	0.550	A	0.002	NO
17	Jefferson Street north of Marron Road	City of Carlsbad	30,000	21,568	0.719	D	21,589	0.720	D	0.001	NO
18	El Camino Real south of SR-78 WB Ramps	City of Oceanside	60,000	50,682	0.845	D	51,178	0.853	D	0.008	NO

* Significant impact criteria for City of Oceanside street segments are an increase in V/C of 0.02 for segments operating at LOS D, E, or F.
Significant impact criteria for City of Carlsbad street segments is an increase in V/C of 0.02 for segments operating at LOS E or F.

Source: Gibson 2012

**Table 4.12-7
EXISTING BASELINE PLUS PROJECT
INTERSECTION PEAK HOUR LEVELS OF SERVICE**

No.	Street Segment	Jurisdiction*	Peak Hour	Existing Baseline		Existing Baseline Plus Project			
				Delay	LOS	Delay	LOS	Change in Delay	Sig. Impact?
1	El Camino Real at Fire Mountain Drive/Skyline Drive	City of Oceanside	A.M.	10.1	B	10.1	B	0.0	NO
			P.M.	11.2	B	11.1	B	-0.1	NO
2	Jefferson Street/Ivy Road at Vista Way/Ivy Road	City of Oceanside	A.M.	27.0	C	27.0	C	0.0	NO
			P.M.	29.9	C	29.9	C	0.0	NO
3	El Camino Real at Vista Way	City of Oceanside	A.M.	20.1	C	20.2	C	0.1	NO
			P.M.	39.4	D	39.6	D	0.2	NO
4	Rancho del Oro Road at Vista Way	City of Oceanside	A.M.	24.6	C	24.6	C	0.0	NO
			P.M.	26.1	C	26.1	C	0.0	NO
5	Jefferson Street at SR-78 WB Ramps	City of Oceanside/Caltrans	A.M.	18.9	B	19.0	B	0.1	NO
			P.M.	23.1	C	23.1	C	0.0	NO
6	Jefferson Street at SR-78 EB Ramps	City of Oceanside/Caltrans	A.M.	17.0	B	16.9	B	-0.1	NO
			P.M.	21.9	C	21.9	C	0.0	NO
7	El Camino Real at SR-78 WB Ramps	City of Oceanside/Caltrans	A.M.	15.5	B	15.6	B	0.1	NO
			P.M.	28.1	C	28.5	C	0.4	NO
8	El Camino Real at SR-78 EB Ramps	City of Oceanside/Caltrans	A.M.	21.6	C	21.7	C	0.1	NO
			P.M.	24.9	C	25.8	C	-0.1	NO
9	El Camino Real at Plaza Drive	City of Carlsbad	A.M.	0.315	A	0.322	A	0.007	NO
			P.M.	0.581	A	0.590	A	0.009	NO
10	Jefferson Street/Marron Road at Jefferson Street	City of Carlsbad	A.M.	0.357	A	0.357	A	0.000	NO
			P.M.	0.549	A	0.549	A	0.000	NO
11	Monroe Street at Marron Road	City of Carlsbad	A.M.	0.243	A	0.243	A	0.000	NO
			P.M.	0.416	A	0.419	A	0.003	NO

Table 4.12-7 (cont.)
EXISTING BASELINE PLUS PROJECT
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Street Segment	Jurisdiction*	Peak Hour	Existing Baseline		Existing Baseline Plus Project			
				Delay	LOS	Delay	LOS	Change in Delay	Sig. Impact?
12	Project Driveway at Marron Road	City of Carlsbad	A.M.	0.176	A	0.181	A	0.005	NO
			P.M.	0.310	A	0.323	A	0.013	NO
13	El Camino Real at Marron Road	City of Carlsbad	A.M.	0.375	A	0.378	A	0.003	NO
			P.M.	0.666	B	0.671	B	0.005	NO
14	I-5 SB Ramps at Carlsbad Village Drive	City of Carlsbad/ Caltrans	A.M.	0.488	A	0.488	A	0.000	NO
			P.M.	0.658	B	0.659	B	0.001	NO
15	I-5 NB Ramps at Carlsbad Village Drive	City of Carlsbad/ Caltrans	A.M.	0.561	A	0.561	A	0.000	NO
			P.M.	0.680	B	0.681	B	0.001	NO
16	Monroe Street at Carlsbad Village Drive	City of Carlsbad	A.M.	0.450	A	0.451	A	0.001	NO
			P.M.	0.392	A	0.395	A	0.003	NO
17	El Camino Real at Carlsbad Village Drive	City of Carlsbad	A.M.	0.489	A	0.490	A	0.001	NO
			P.M.	0.526	A	0.528	A	0.002	NO
18	El Camino Real at Hosp Way	City of Carlsbad	A.M.	0.346	A	0.347	A	0.001	NO
			P.M.	0.461	A	0.463	A	0.002	NO

* Significant impact criteria for City of Oceanside intersections is an increase in V/C of 0.02 for segments operating at LOS E, or F.

Significant impact criteria for City of Carlsbad intersections is an increase in V/C of 0.02 for segments operating at LOS E or F.

Source: Gibson 2012

Near Term (Year 2020) Conditions

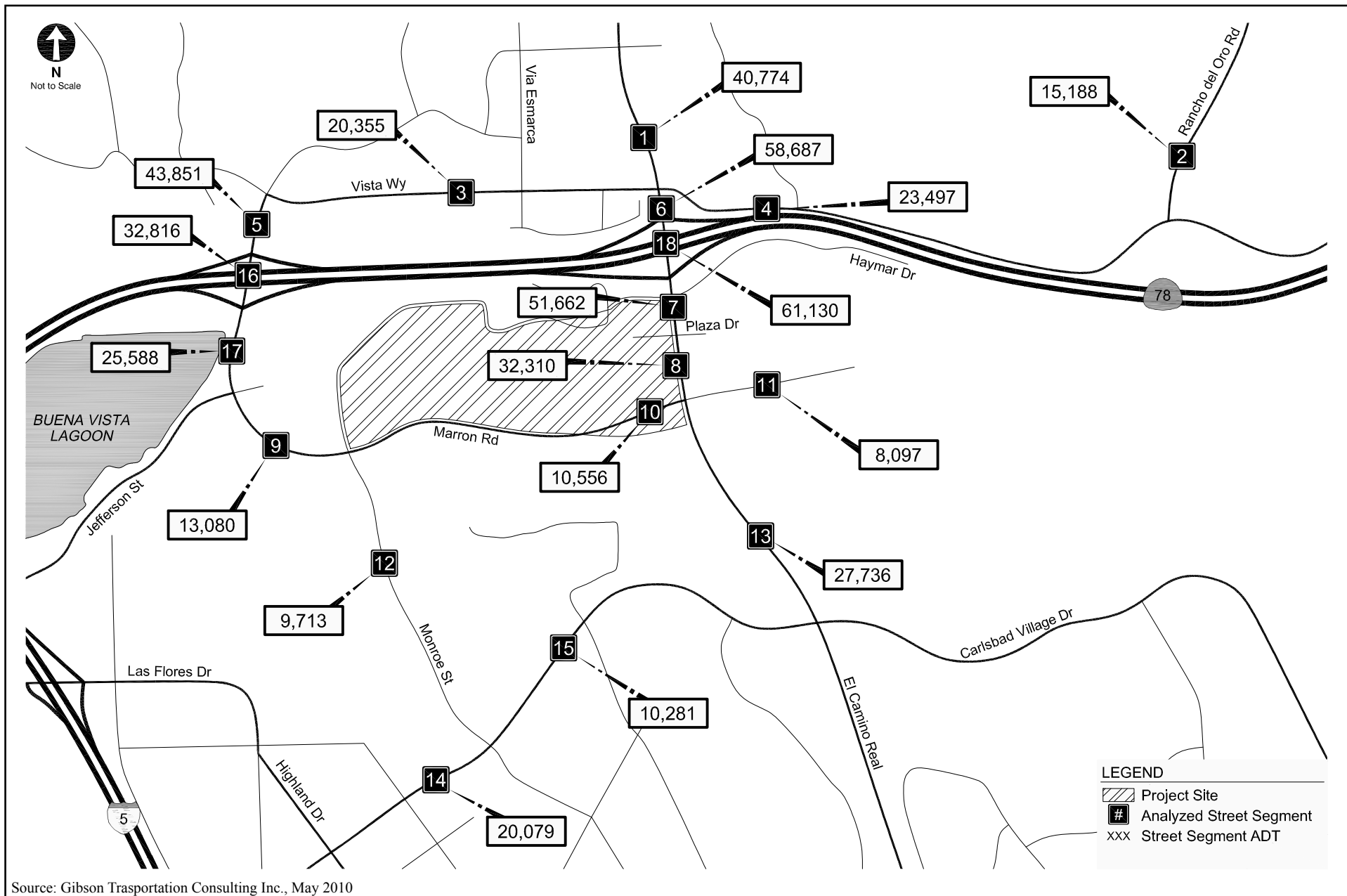
The following provides a description of Near Term (Year 2020) conditions with and without implementation of the SP and current SDP proposal for street segments and intersections within the traffic study area.

A hotel development, referred to as the Inns at Buena Vista Creek, is proposed by another developer for a parcel in the City of Oceanside to the north of the project site and east of Jefferson Street, as described under Subsection 5.1.2, *Cumulative Projects*. The hotel development is not included in the future projections computed from the SANDAG model runs for the years 2020 and 2030. Due to the close proximity of the hotel development to the project site, alternative traffic impact analyses were conducted for the Future Conditions (Year 2020 and Year 2030), with trips from the hotel development included in the Future without Project traffic projections. Since the Transportation Study was prepared, the hotel developer has refined their design and increased the hotel room count from 400 rooms to 426 rooms. The project traffic engineer conducted a review of the increase in hotel rooms relative to the project analysis and determined that 16 additional AM peak hour trips and 21 additional PM peak hour trips spread over the entire project study area would not change the conclusions reached for the proposed project. As such, the analysis conducted in May 2010 is still a valid projection of the Near-Term and Buildout traffic conditions anticipated with and without the proposed project (Gibson 2012).

Street Segments

Table 4.12-8, *Near Term (Year 2020) Street Segment Daily Levels of Service*, summarizes the traffic volumes, capacities, and LOS at the study area street segments for Near Term (Year 2020) conditions with and without the proposed project. Near Term and Near Term Plus Project street segment daily volumes are presented in Figure 4.12-8, *Near Term Without Project Street Segment Daily Traffic*, and Figure 4.12-9, *Near Term Plus Project Street Segment Daily Traffic*, respectively. As shown in Table 4.12-8, 14 of the 18 analyzed street segments are projected to operate at LOS D or better. Of the eight street segments in the City of Oceanside, the following five segments are projected to operate at LOS D, E, or F:

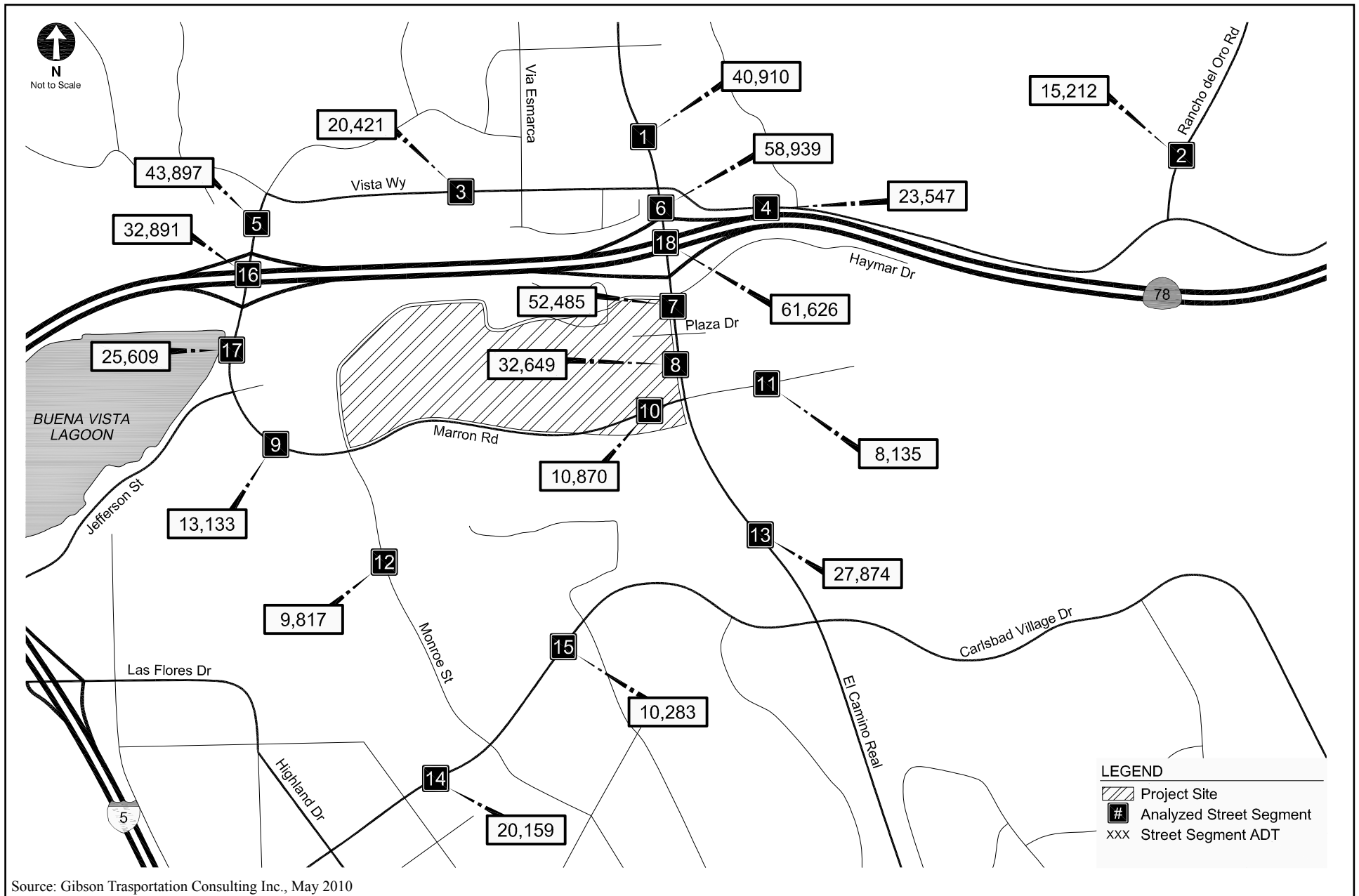
- Vista Way west of El Camino Real;
- Vista Way east of El Camino Real;
- Jefferson Street south of Vista Way;
- El Camino Real south of Vista Way; and
- El Camino Real south of the SR-78 westbound ramps.



Near Term Without Project Street Segment Daily Traffic

WESTFIELD CARLSBAD

Figure 4.12-8



Near Term Plus Project Street Segment Daily Traffic

WESTFIELD CARLSBAD

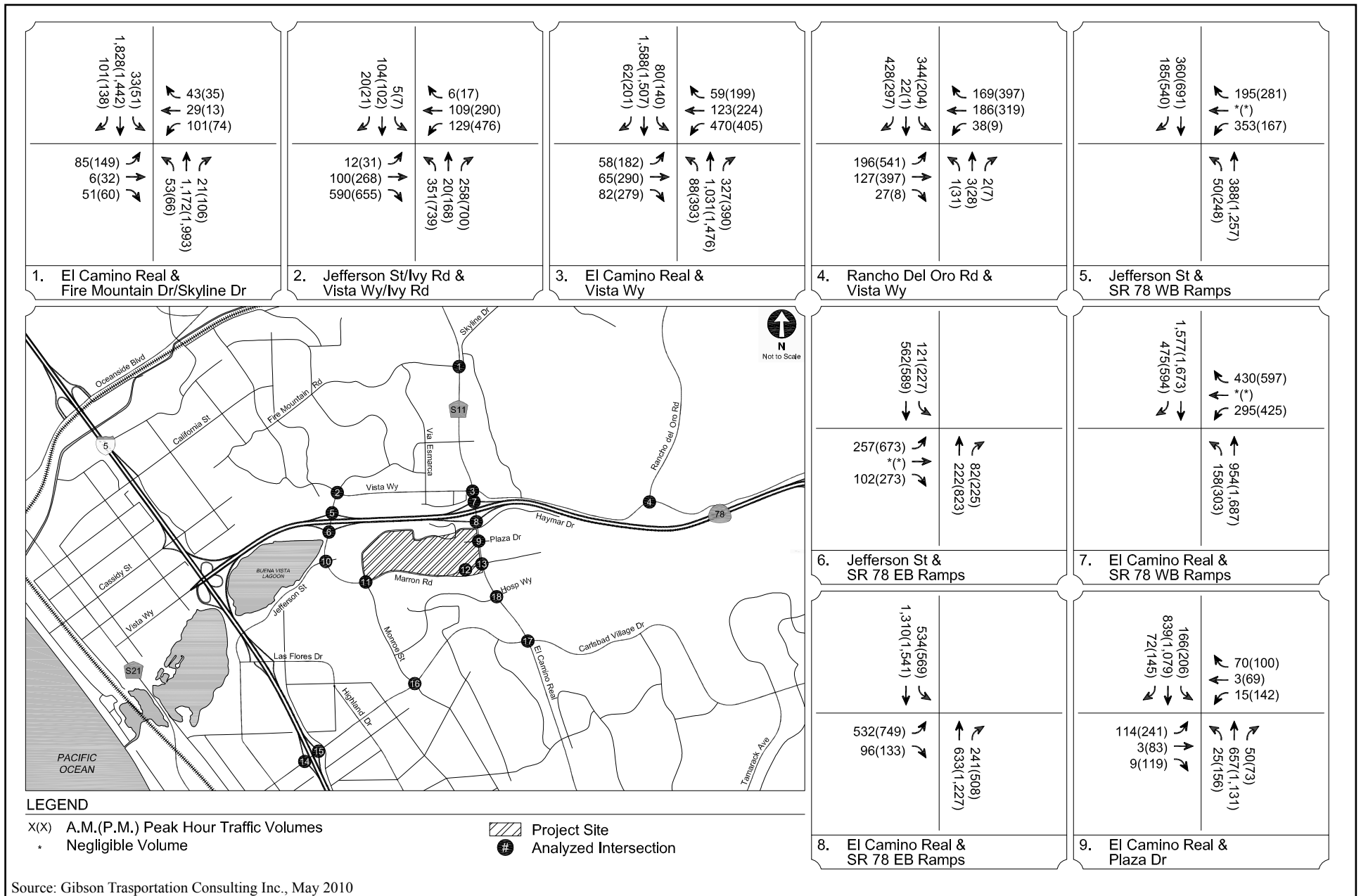
Figure 4.12-9

Since the City of Oceanside's standard for an acceptable LOS for daily street segment operations is LOS C, a peak hour analysis is required for segments projected to operate at LOS D or worse. The street segment peak hour analysis was conducted for the street segments in the City of Carlsbad jurisdiction and the segments of El Camino Real and Jefferson Street (City of Oceanside jurisdiction) projected to operate at a daily LOS of D or worse. While the two Oceanside segments along Vista Way are projected to operate at a daily LOS D or E, the project would not add enough traffic to these segments to result in a decrease in speed greater than or equal to 1.0 mph (Oceanside's significance criteria) during either peak hour. The project would add three or fewer trips (less than 1.4 percent of total traffic on Vista Way) during the morning peak hour to either direction of the analyzed segments on Vista Way as compared to 14 project-generated trips on El Camino Real (south of the SR-78 westbound ramps). During the afternoon peak hour, the project would add five or fewer trips (less than 0.7 percent of total traffic on Vista Way) to either direction of the analyzed segments on Vista Way as compared to 25 project-generated trips on El Camino Real (south of the SR-78 westbound ramps). Projected traffic on Vista Way would represent a much smaller number of vehicles than would be expected in normal day-to-day differences in traffic flow along Vista Way, and would not cause a drop in travel speeds. Therefore, no further analysis (peak hour operations) was conducted at these two segments.

The results of the peak hour analysis show that all 10 street segments in the City of Carlsbad are projected to operate at LOS D or better during both the morning and afternoon peak hours (refer to Tables 28 and 29 of the Transportation Study [Appendix F] for detailed street segment morning and afternoon peak hour analyses, respectively). The project would not result in an increase in V/C of 0.02 or more at any of the City of Carlsbad street segments. The City of Oceanside segment of Jefferson Street south of Vista Way is projected to operate at LOS B or C during both peak hours; thus, no significant impact would occur. The street segments of El Camino Real south of Vista Way and south of the SR-78 westbound ramps are projected to operate at LOS E or F during both peak hours, considered unacceptable LOS for peak hour segment operations. However, the project would not add enough traffic to these segments to result in a decrease in speed of greater than or equal to 1.0 mph (Oceanside's significance criteria) during either peak hour and impacts would be less than significant. As such, the project would not result in a direct significant peak hour impact at any of the analyzed street segments during either peak hour, nor would the project add enough traffic to any of the 18 street segments to result in a direct significant daily traffic impact.

Intersections

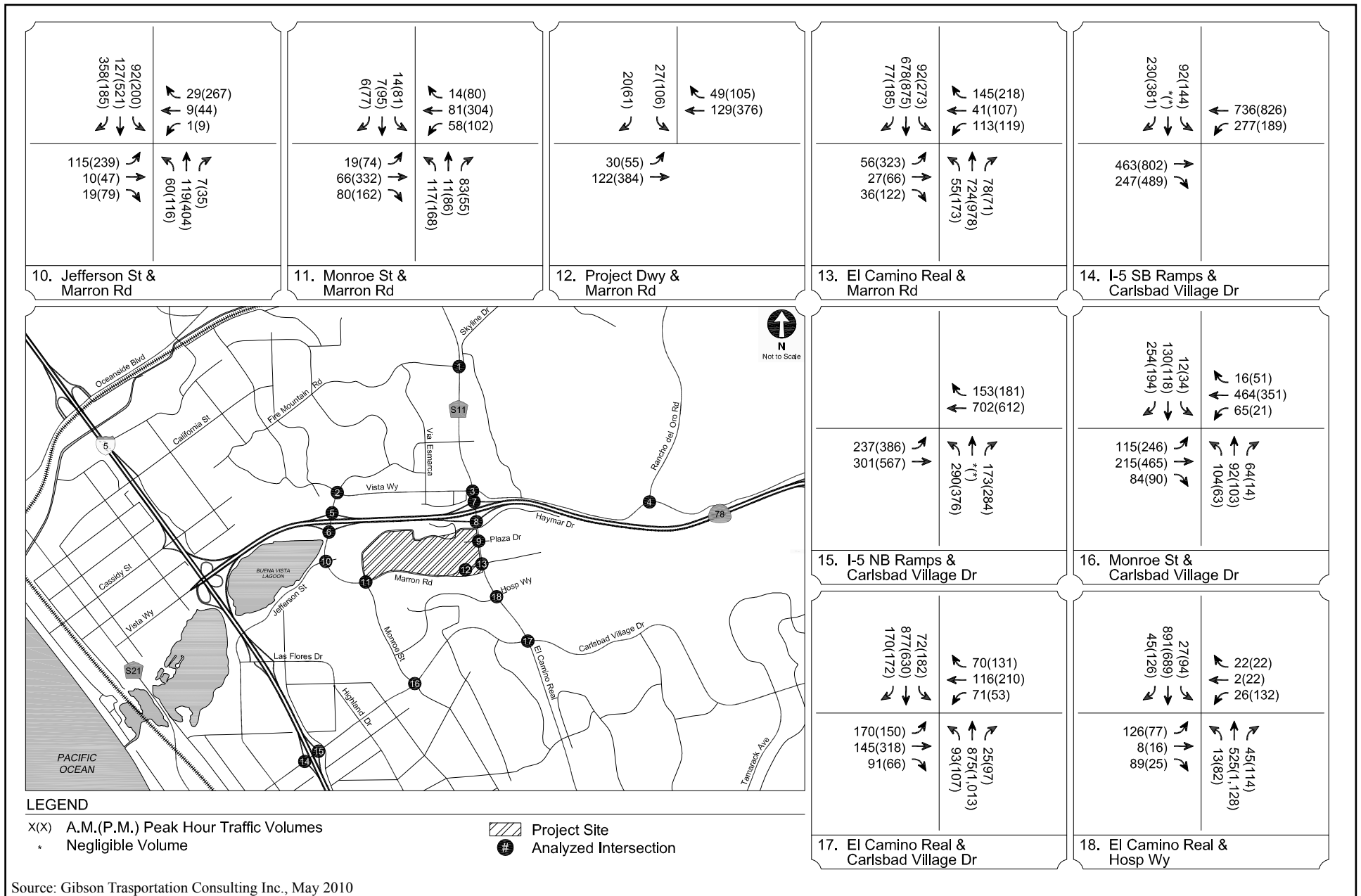
Table 4.12-9, *Near Term (Year 2020) Intersection Peak Hour Levels of Service*, summarizes the intersection operating conditions for the weekday morning and afternoon peak hours for Near Term (Year 2020) conditions with and without the proposed project. Figures 4.12-10a and 4.12-10b, *Near Term Without Project Intersection Peak Hour Traffic*, and Figures 4.12-11a and 4.12-11b, *Near Term Plus Project Intersection Peak Hour Traffic*, graphically illustrate the Near Term traffic volumes at the analyzed intersections for the morning and afternoon peak hours without and with the proposed project, respectively. As shown in Table 4.12-9, under the Near Term Plus Project conditions, all of the analyzed intersections are projected to operate at an acceptable LOS (i.e., LOS D or better) during both the morning and afternoon peak hours, and no significant impact would occur. Additionally, the project would not result in an increase in delay of 2.0 seconds at any intersection except the intersection of the project driveway and Marron Road, which is projected to operate at LOS A and B in the morning and afternoon peak hours, respectively. The project is, therefore, not expected to result in any direct significant impact at any of the analyzed intersections under Near Term conditions.



Near Term Without Project Intersection Peak Hour Traffic

WESTFIELD CARLSBAD

Figure 4.12-10a



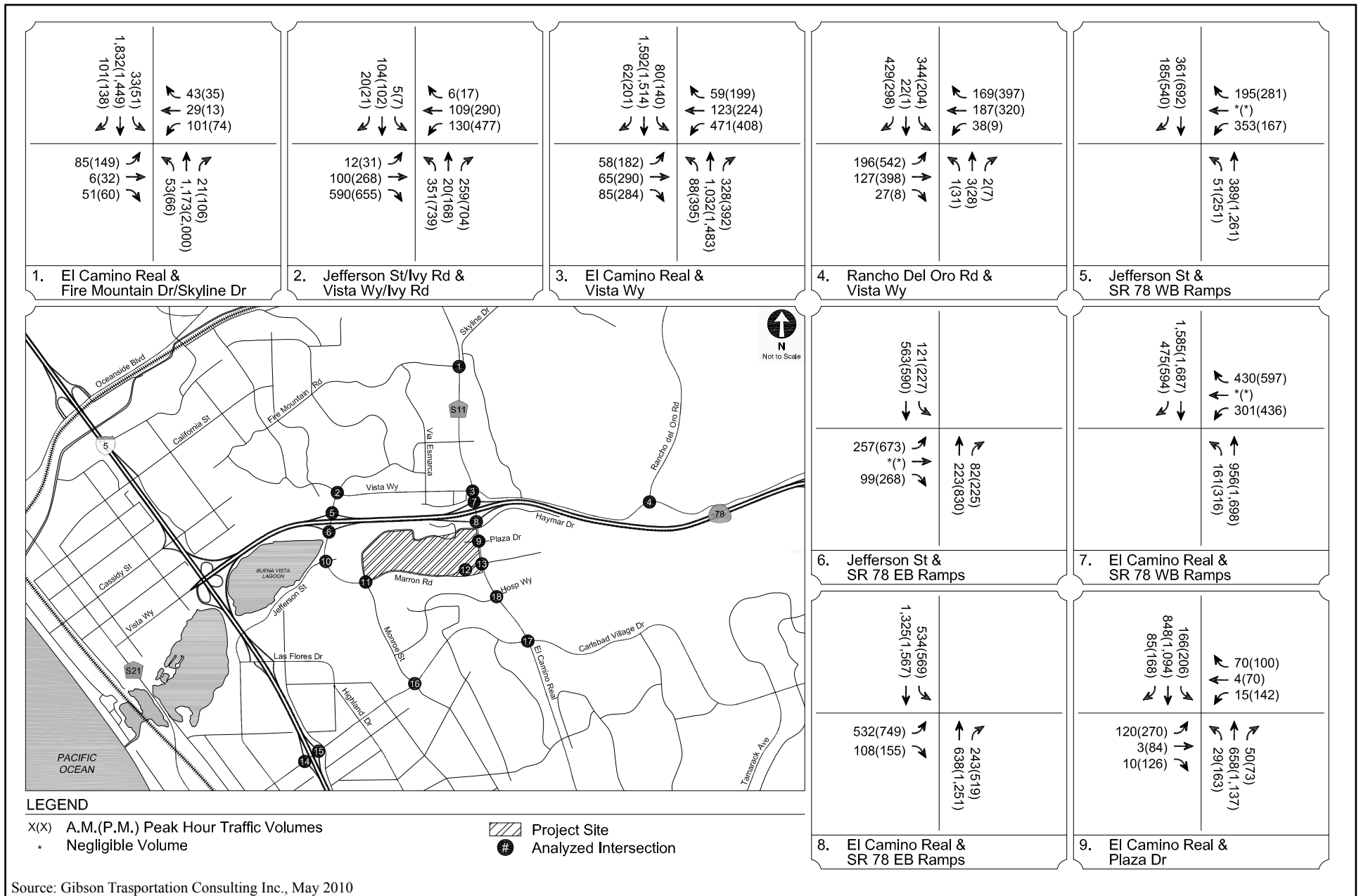
Source: Gibson Transportation Consulting Inc., May 2010

I:\ArcGIS\CRB-03 PlazaCaminoReal\Map\ENV\EIR\Fig4_12-10b_NearTermPlusWO.indd -EV

Near Term Without Project Intersection Peak Hour Traffic

WESTFIELD CARLSBAD

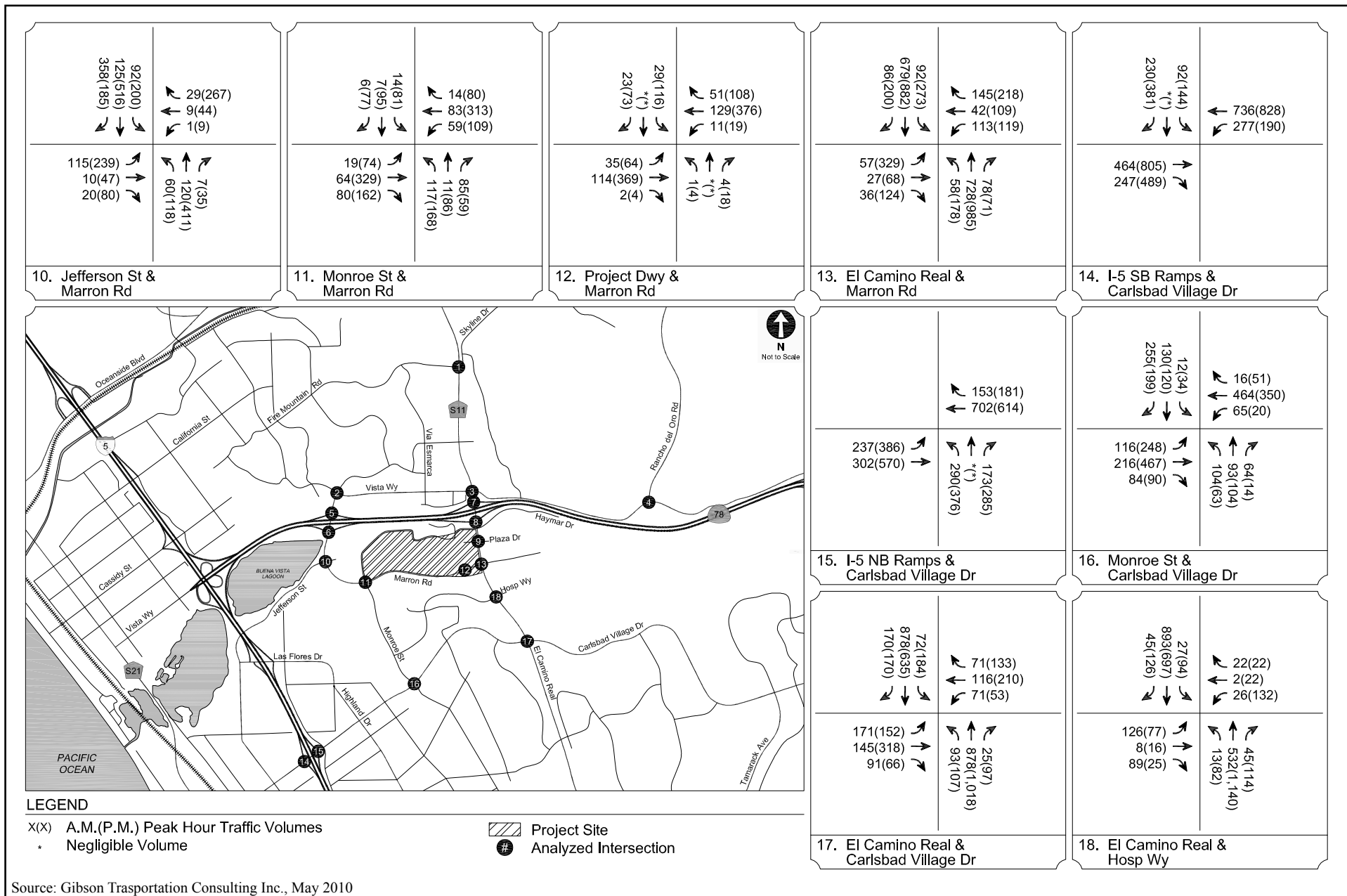
Figure 4.12-10b



Near Term Plus Project Intersection Peak Hour Traffic

WESTFIELD CARLSBAD

Figure 4.12-11a



Near Term Plus Project Intersection Peak Hour Traffic

WESTFIELD CARLSBAD

Figure 4.12-11b

Table 4.12-8
NEAR TERM (YEAR 2020) STREET SEGMENT DAILY LEVELS OF SERVICE

No.	Street Segment	Jurisdiction*	Capacity at LOS E	Near Term			Near Term plus Project				
				ADT	V/C	LOS	ADT	V/C	LOS	Change in V/C	Sig. Impact?
1	El Camino Real north of Vista Way	City of Oceanside	60,000	40,774	0.680	B	40,910	0.682	B	0.002	NO
2	Rancho del Oro Road north of Vista Way	City of Oceanside	45,000	15,188	0.338	A	15,212	0.338	A	0.000	NO
3	Vista Way west of El Camino Real	City of Oceanside	25,000	20,355	0.814	D	20,421	0.817	D	0.003	NO
4	Vista Way east of El Camino Real	City of Oceanside	25,000	23,497	0.940	E	23,547	0.942	E	0.002	NO
5	Jefferson Street south of Vista Way	City of Oceanside	50,000	43,851	0.877	D	43,897	0.878	D	0.001	NO
6	El Camino Real south of Vista Way	City of Oceanside	60,000	58,687	0.978	E	58,939	0.982	E	0.004	NO
7	El Camino Real north of Plaza Drive	City of Carlsbad	60,000	51,662	0.861	D	52,485	0.875	D	0.014	NO
8	El Camino Real south of Plaza Drive	City of Carlsbad	60,000	32,310	0.539	B	32,649	0.544	B	0.005	NO
9	Marron Road south of Jefferson Street	City of Carlsbad	30,000	13,080	0.436	B	13,133	0.438	B	0.002	NO
10	Marron Road west of El Camino Real	City of Carlsbad	30,000	10,556	0.352	B	10,870	0.362	B	0.010	NO
11	Marron Road east of El Camino Real	City of Carlsbad	30,000	8,097	0.270	A	8,135	0.271	A	0.001	NO
12	Monroe Street south of Marron Road	City of Carlsbad	15,000	9,713	0.648	C	9,817	0.654	C	0.006	NO
13	El Camino Real south of Marron Road	City of Carlsbad	60,000	27,736	0.462	B	27,874	0.465	B	0.003	NO
14	Carlsbad Village Drive west of Monroe Street	City of Carlsbad	30,000	20,079	0.669	D	20,159	0.672	D	0.003	NO
15	Carlsbad Village Drive east of Monroe Street	City of Carlsbad	30,000	10,281	0.343	B	10,283	0.343	B	0.000	NO
16	Jefferson Street south of SR-78 WB Ramps	City of Oceanside	50,000	32,816	0.656	B	32,891	0.658	B	0.002	NO
17	Jefferson Street north of Marron Road	City of Carlsbad	30,000	25,588	0.853	E	25,609	0.854	E	0.001	NO
18	El Camino Real south of SR-78 WB Ramps	City of Oceanside	60,000	61,130	1.019	F	61,626	1.027	F	0.008	NO

* Significant impact criteria for City of Oceanside street segments are an increase in V/C of 0.02 for segments operating at LOS D, E, or F.

Significant impact criteria for City of Carlsbad street segments is an increase in V/C of 0.02 for segments operating at LOS E or F.

Source: Gibson 2012

Table 4.12-9
NEAR TERM (YEAR 2020) INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Street Segment	Jurisdiction*	Peak Hour	Near Term		Near Term Plus Project			
				Delay	LOS	Delay	LOS	Change in Delay	Sig. Impact?
1	El Camino Real at Fire Mountain Drive/ Skyline Drive	City of Oceanside	A.M.	10.8	B	10.8	B	0.0	NO
			P.M.	11.3	B	11.3	B	0.0	NO
2	Jefferson Street/Ivy Road at Vista Way/Ivy Road	City of Oceanside	A.M.	25.8	C	25.8	C	0.0	NO
			P.M.	31.4	C	31.4	C	0.0	NO
3	El Camino Real at Vista Way	City of Oceanside	A.M.	20.7	C	20.8	C	0.1	NO
			P.M.	41.1	D	41.3	D	0.2	NO
4	Rancho del Oro Road at Vista Way	City of Oceanside	A.M.	24.9	C	24.9	C	0.0	NO
			P.M.	27.6	C	27.6	C	0.0	NO
5	Jefferson Street at SR-78 WB Ramps	City of Oceanside/ Caltrans	A.M.	19.7	B	19.8	B	0.1	NO
			P.M.	17.6	B	17.6	B	0.0	NO
6	Jefferson Street at SR-78 EB Ramps	City of Oceanside/ Caltrans	A.M.	18.6	B	18.6	B	0.0	NO
			P.M.	22.2	C	22.2	C	0.0	NO
7	El Camino Real at SR-78 WB Ramps	City of Oceanside/ Caltrans	A.M.	16.1	B	16.2	B	0.1	NO
			P.M.	26.7	C	27.1	C	0.4	NO
8	El Camino Real at SR-78 EB Ramps	City of Oceanside/ Caltrans	A.M.	20.5	C	20.4	C	-0.1	NO
			P.M.	30.1	C	30.0	C	-0.1	NO
9	El Camino Real at Plaza Drive	City of Carlsbad	A.M.	20.6	C	20.6	C	0.0	NO
			P.M.	30.1	C	30.4	C	0.3	NO
10	Jefferson Street/Marron Road at Jefferson Street	City of Carlsbad	A.M.	24.6	C	24.6	C	0.0	NO
			P.M.	49.9	D	50.0	D	0.1	NO
11	Monroe Street at Marron Road	City of Carlsbad	A.M.	30.0	C	30.1	C	0.1	NO
			P.M.	41.3	D	41.4	D	0.1	NO
12	Project Driveway at Marron Road	City of Carlsbad	A.M.	6.2	A	19.5	B	3.3	NO
			P.M.	12.0	B	17.0	B	5.0	NO

Table 4.12-9 (cont.)
NEAR TERM (YEAR 2020) INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Street Segment	Jurisdiction*	Peak Hour	Near Term		Near Term Plus Project			
				Delay	LOS	Delay	LOS	Change in Delay	Sig. Impact?
13	El Camino Real at Marron Road	City of Carlsbad	A.M.	27.7	C	27.7	C	0.0	NO
			P.M.	37.2	D	37.2	D	0.0	NO
14	I-5 SB Ramps at Carlsbad Village Drive	City of Carlsbad/ Caltrans	A.M.	21.0	C	21.0	C	0.0	NO
			P.M.	21.9	C	22.0	C	0.1	NO
15	I-5 NB Ramps at Carlsbad Village Drive	City of Carlsbad/ Caltrans	A.M.	26.0	C	26.0	C	0.0	NO
			P.M.	29.0	C	29.0	C	0.0	NO
16	Monroe Street at Carlsbad Village Drive	City of Carlsbad	A.M.	33.3	C	33.3	C	0.0	NO
			P.M.	42.0	D	42.2	D	0.2	NO
17	El Camino Real at Carlsbad Village Drive	City of Carlsbad	A.M.	26.3	C	26.3	C	0.0	NO
			P.M.	37.6	D	37.7	D	0.1	NO
18	El Camino Real at Hosp Way	City of Carlsbad	A.M.	21.4	C	21.3	C	-0.1	NO
			P.M.	26.4	C	26.2	C	-0.2	NO

* Significant impact criteria for City of Oceanside intersections are an increase in V/C of 0.02 for segments operating at LOS E, or F.

Significant impact criteria for City of Carlsbad intersections is an increase in V/C of 0.02 for segments operating at LOS E or F.

Source: Gibson 2012

Horizon Year (Year 2030) Without Project Conditions

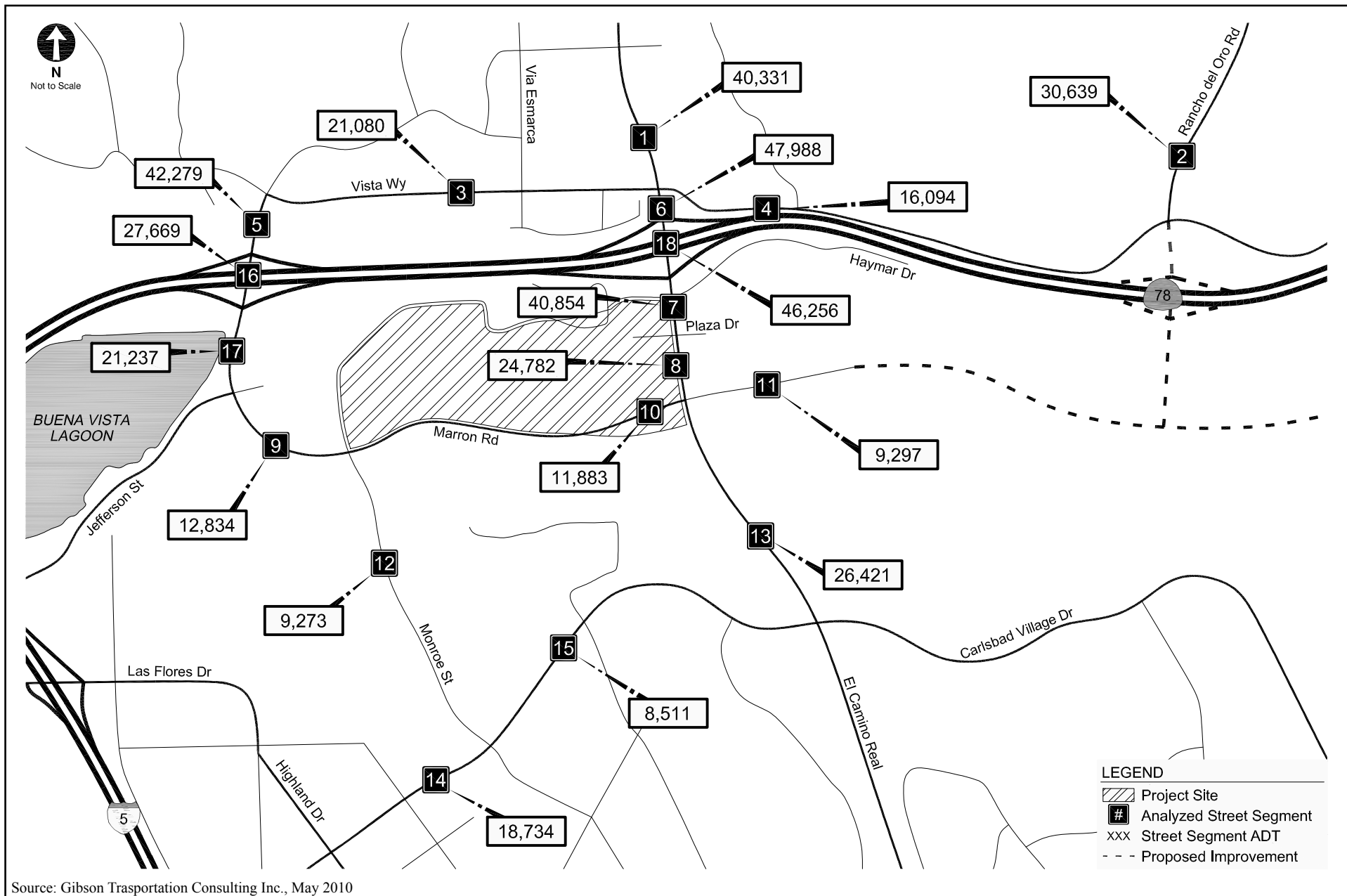
The following provides a description of Horizon Year (Year 2030) conditions with and without implementation of the SP and current SDP proposal for street segments and intersections within the traffic study area.

Street Segments

Table 4.12-10, *Horizon Year (Year 2030) Street Segment Daily Levels of Service*, summarizes the traffic volumes, capacities, and LOS at the study area street segments for Horizon Year (Year 2030) conditions with and without the proposed project. Horizon Year and Horizon Year Plus Project street segment daily volumes are presented in Figure 4.12-12, *Horizon Year Without Project Street Segment Daily Traffic*, and Figure 4.12-13, *Horizon Year Plus Project Street Segment Daily Traffic*, respectively. As shown in Table 4.12-10, all 18 of the analyzed street segments are projected to operate at LOS D or better. Of the eight street segments in the City of Oceanside, the following three segments are projected to operate at LOS D:

- Vista Way west of El Camino Real;
- Jefferson Street south of Vista Way; and
- El Camino Real south of Vista Way.

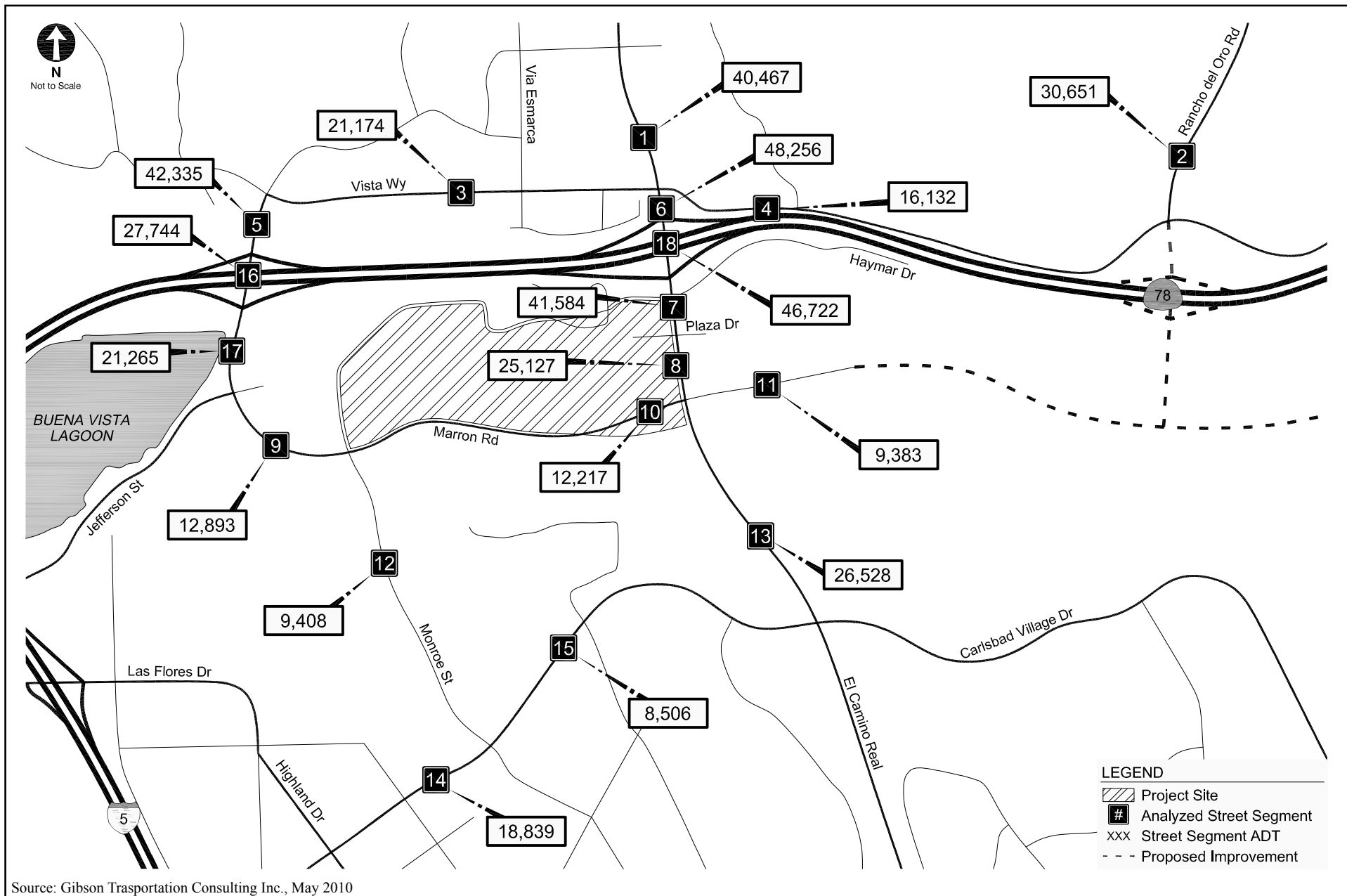
Since the City of Oceanside's standard for an acceptable LOS for daily street segment operations is LOS C, a peak hour analysis was required for the segments projected to operate at LOS D or worse. The street segment peak hour analysis was conducted for all of the street segments in the City of Carlsbad jurisdiction and the segments of El Camino Real and Jefferson Street (City of Oceanside jurisdiction) projected to operate at a daily LOS of D or worse. While the segment of Vista Way west of El Camino Real is projected to operate at LOS D, the project would not add enough traffic to these segments to result in a decrease in speed of greater than or equal to 1.0 mph (Oceanside's significance criteria) during either peak hour. The project is projected to add one and four trips to the westbound and eastbound directions, respectively, of Vista Way (less than 1.8 percent of total traffic on Vista Way) during the morning peak hour as compared to 14 project-generated trips on El Camino Real (south of the SR-78 westbound ramps). During the afternoon peak hour, the project is projected to add three and seven trips to the westbound and eastbound directions, respectively, of Vista Way (less than 0.7 percent of total traffic on Vista Way) as compared to 22 and 25 project-generated trips to the northbound and southbound directions, respectively, of El Camino Real (south of the SR-78 westbound ramps). Projected traffic on Vista Way would represent a much smaller number of vehicles than would be expected



Horizon Year Without Project Street Segment Daily Traffic

WESTFIELD CARLSBAD

Figure 4.12-12



Horizon Year Plus Project Street Segment Daily Traffic

WESTFIELD CARLSBAD

Figure 4.12-13

in normal day-to-day differences in traffic flow along Vista Way, and not likely cause a drop in travel speeds. Therefore, no further analysis (peak hour operations) was conducted at the segment.

The results of the peak hour analysis show that all 10 street segments in the City of Carlsbad and the segment of Jefferson Street south of Vista Way in the City of Oceanside are projected to operate at LOS D or better during both the morning and afternoon peak hours (refer to Tables 35 and 36 of the Transportation Study [Appendix F] for detailed street segment morning and afternoon peak hour analyses, respectively). The project would not result in an increase in V/C of 0.02 or more at any of the City of Carlsbad street segments. The City of Oceanside segment of El Camino Real south of Vista Way is projected to operate at LOS F in the southbound direction during the afternoon peak hour, considered unacceptable LOS for peak hour segment operations. However, the project does not result in a decrease in speed of greater than or equal to 1.0 mph (Oceanside's significance criteria) during either peak hour at this street segment and impacts would be less than significant. Therefore, the project would not result in a direct significant peak hour impact at any of the analyzed street segments during either peak hour. Additionally, the project would not add enough traffic to any of the 18 street segments to result in a direct significant impact.

It should be noted that the SANDAG *Final 2008 Congestion Management Program Update* identified the roadway segment on El Camino Real from Plaza Drive to Vista Way to be "deficient" and requiring a "deficiency plan." As the designated congestion management agency, SANDAG subsequently chose to "opt out" of the state CMP process, in accordance with the CMP legislation. Specifically, a majority of the local jurisdictions representing a majority of the population in San Diego County adopted resolutions electing to be exempt from the state congestion management program. Therefore, the CMP designation of El Camino Real as a deficient roadway segment was no longer relevant, and a deficiency plan was no longer required for this roadway section. As shown above, the proposed project would not cause significant impacts to this segment.

Intersections

Table 4.12-11, *Horizon Year (Year 2030) Intersection Peak Hour Levels of Service*, summarizes the intersection operating conditions for the weekday morning and afternoon peak hours for Horizon Year (Year 2030) conditions with and without the proposed project. Figures 4.12-14a and 4.12-14b, *Horizon Year Without Project Intersection Peak Hour Traffic*, and Figures 4.12-15a and 4.12-15b, *Horizon Year Plus Project Intersection Peak Hour Traffic*, graphically illustrate the Horizon Year traffic volumes at the analyzed intersections for the

morning and afternoon peak hours without and with the proposed project, respectively. As shown in Table 4.12-11, under the Horizon Year Plus Project conditions, 17 of the 18 analyzed intersections are projected to operate at an acceptable LOS (i.e., LOS D or better) during both the morning and afternoon peak hours. The intersection of Jefferson Street and the SR-78 westbound ramps is projected to operate at LOS B in the morning peak hour and LOS E in the afternoon peak hour. However, the project does not result in an increase in delay of 2.0 seconds at this intersection over Horizon Year without project conditions; therefore, project-related impacts would be less than significant.

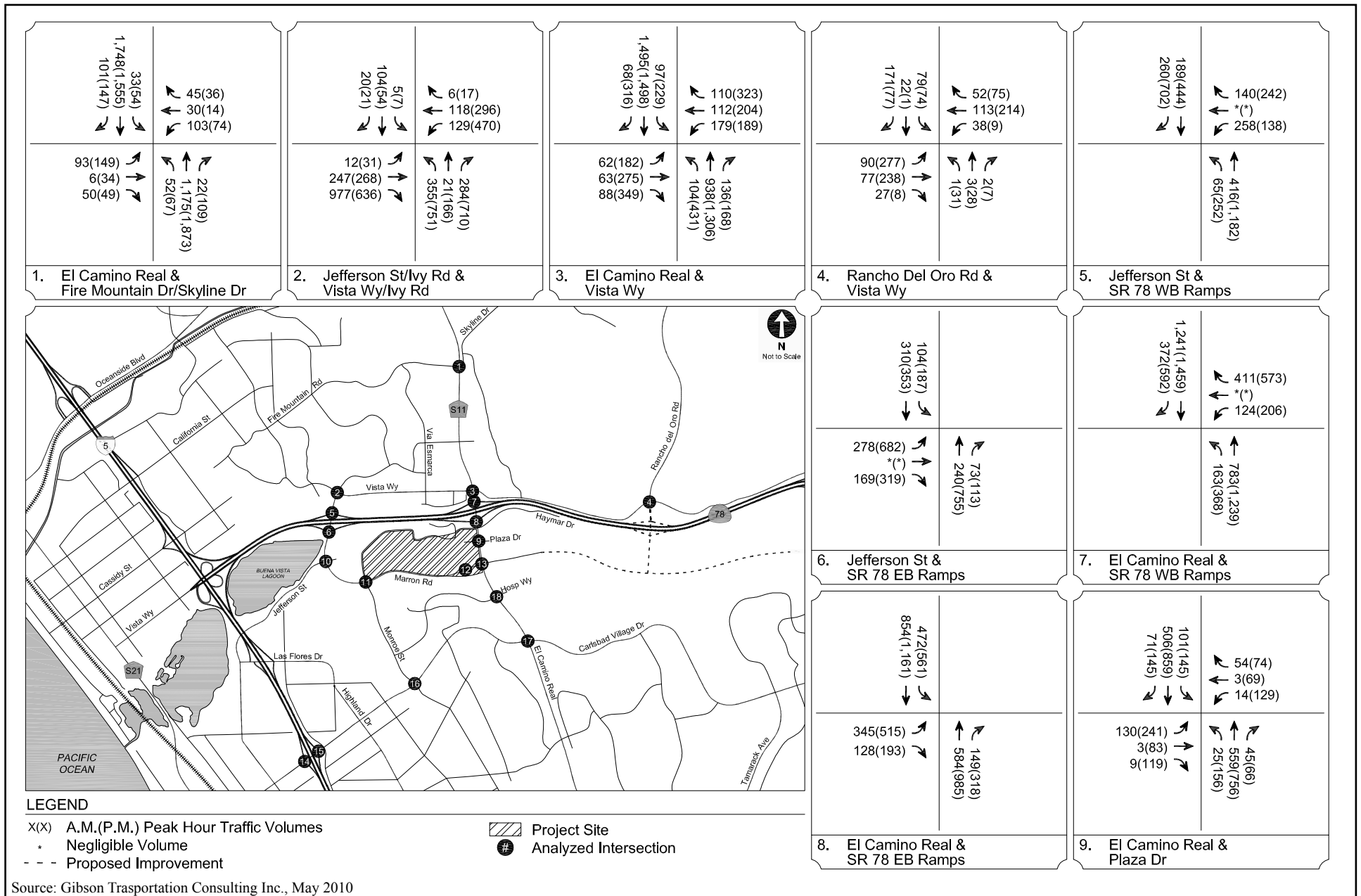
The project does not result in an increase in delay of 2.0 seconds at any intersection except the intersection of the project driveway and Marron Road, which is projected to operate at LOS A and B in the morning and afternoon peak hours, respectively. The project is, therefore, not expected to result in any direct significant impact at any of the analyzed intersections under Horizon Year conditions.

Intersection Lane Volume Operations

As discussed under Section 4.12.1, *Environmental Setting*, six of the 18 analyzed intersections are freeway ramp locations, including:

- Jefferson Street and SR-78 westbound ramps;
- Jefferson Street and SR-78 eastbound ramps;
- El Camino Real and SR-78 westbound ramps;
- El Camino Real and SR-78 eastbound ramps;
- I-5 southbound ramps and Carlsbad Village Drive; and
- I-5 northbound ramps and Carlsbad Village Drive.

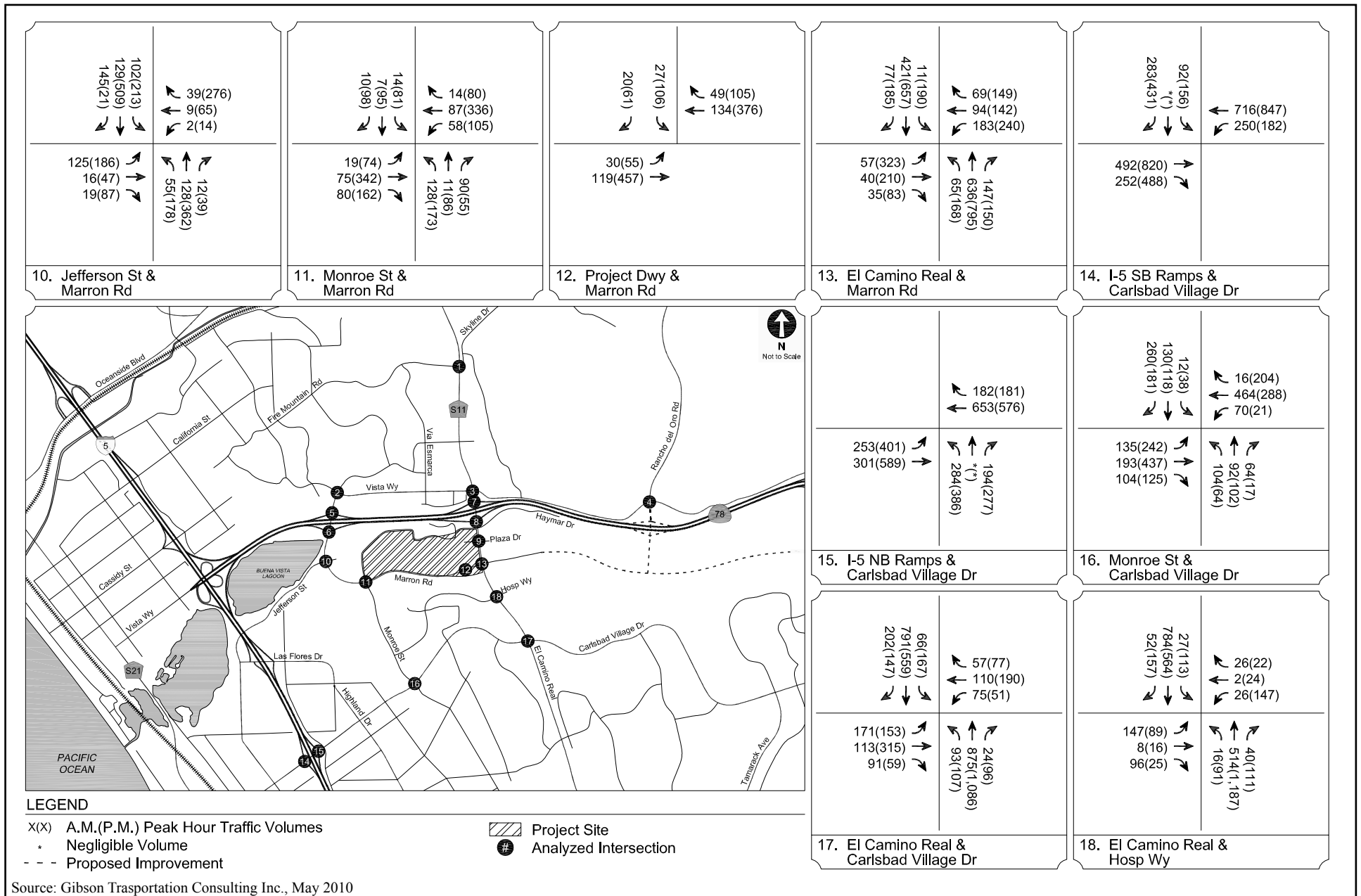
These six ramp locations were evaluated using the ILV methodology for all existing and future scenarios. The results of the analysis show that all of the study area freeway intersections would operate within capacity (“stable” conditions) under all scenarios (refer to Chapter 5, *Caltrans Intersection Lane Volume Analysis*, of the Transportation Study [Appendix F] for the detailed ILV analysis).



Horizon Year Without Project Intersection Peak Hour Traffic

WESTFIELD CARLSBAD

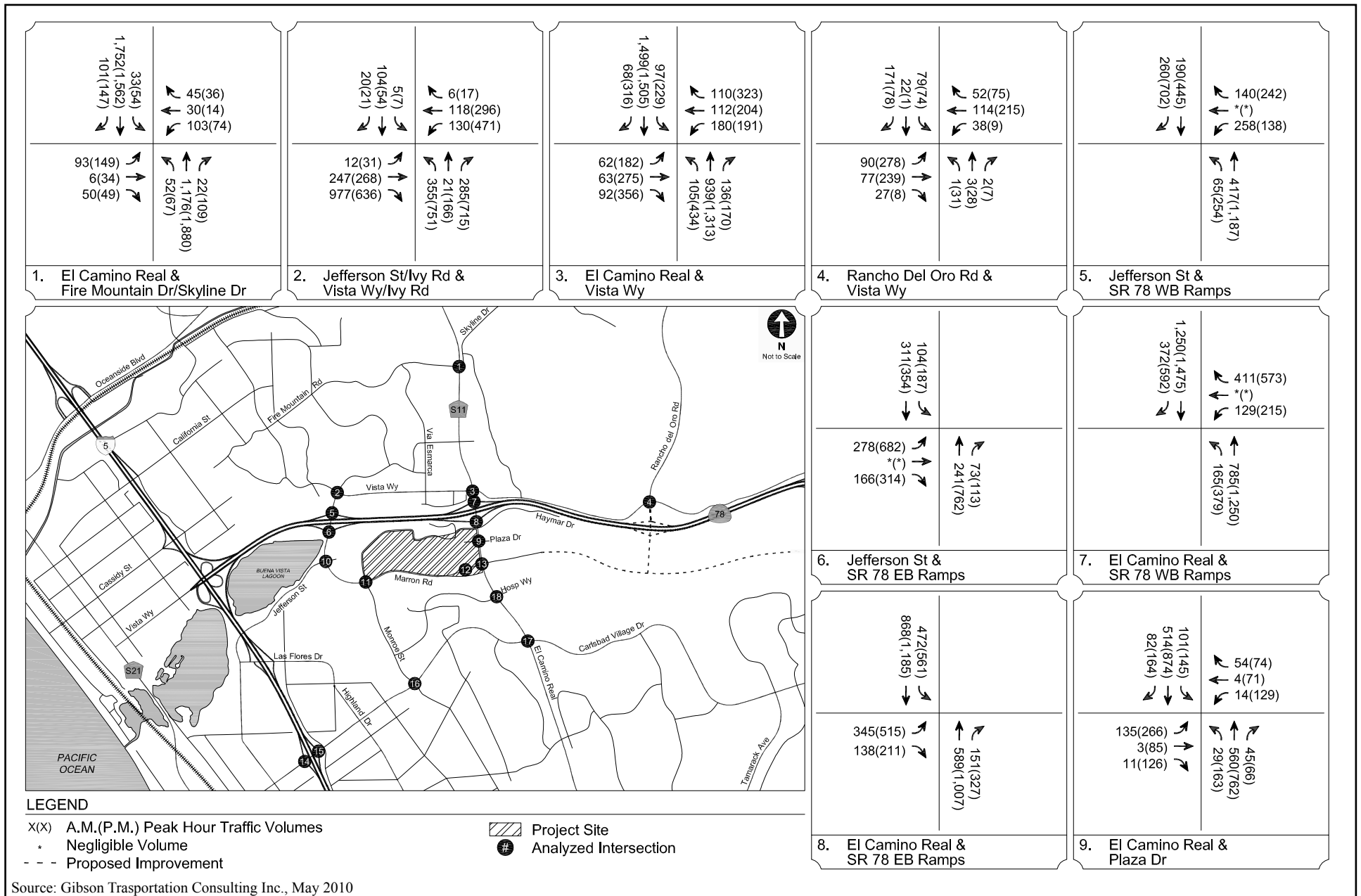
Figure 4.12-14a



Horizon Year Without Project Intersection Peak Hour Traffic

WESTFIELD CARLSBAD

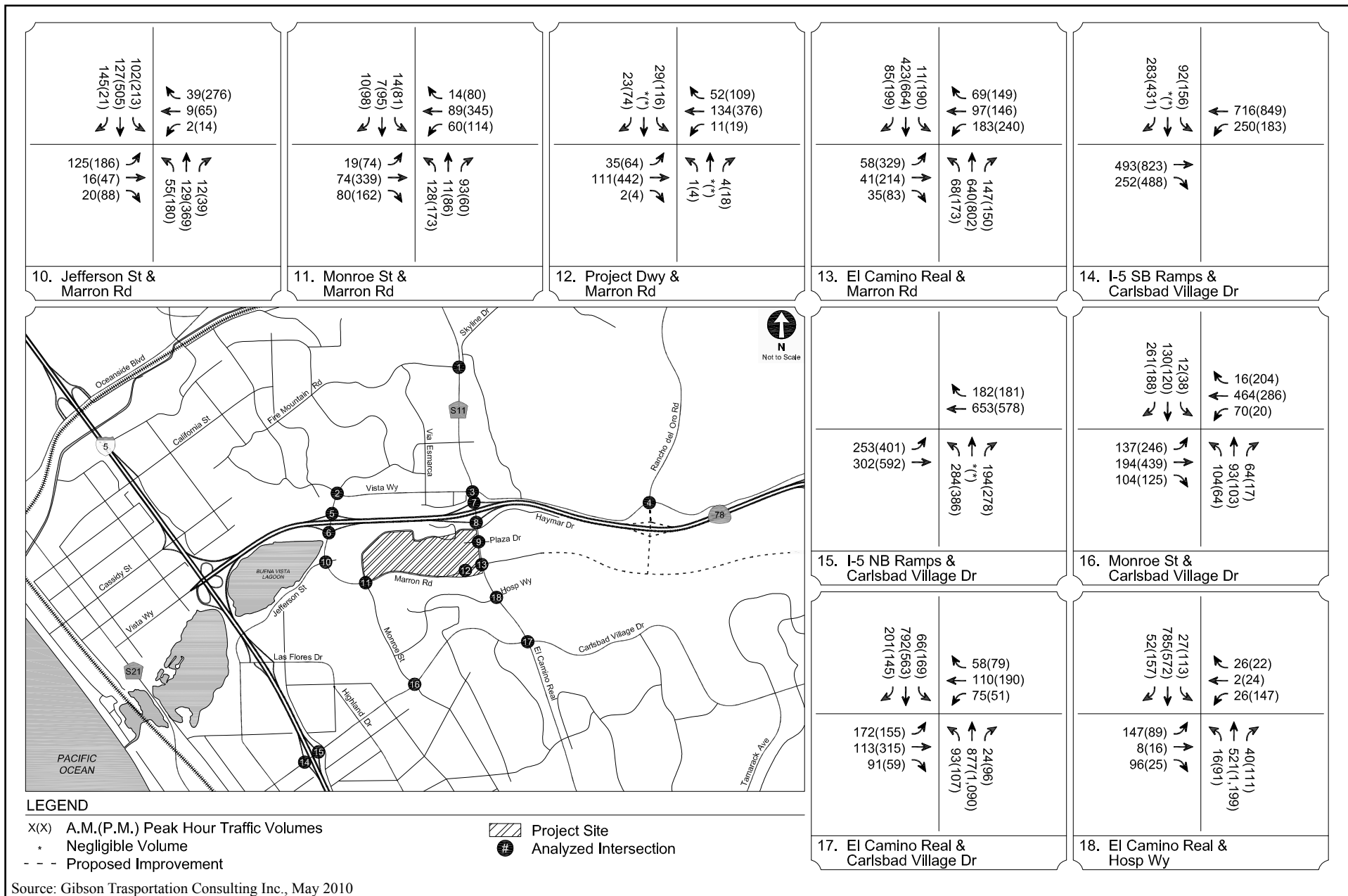
Figure 4.12-14b



Horizon Year Plus Project Intersection Peak Hour Traffic

WESTFIELD CARLSBAD

Figure 4.12-15a



Horizon Year Plus Project Intersection Peak Hour Traffic

WESTFIELD CARLSBAD

Figure 4.12-15b

Table 4.12-10
HORIZON YEAR (YEAR 2030) STREET SEGMENT DAILY LEVELS OF SERVICE

No.	Street Segment	Jurisdiction*	Capacity at LOS E	Horizon Year			Horizon Year plus Project				
				ADT	V/C	LOS	ADT	V/C	LOS	Change in V/C	Sig. Impact?
1	El Camino Real north of Vista Way	City of Oceanside	60,000	40,331	0.672	B	40,467	0.674	B	0.002	NO
2	Rancho del Oro Road north of Vista Way	City of Oceanside	45,000	30,639	0.681	B	30,651	0.681	B	0.000	NO
3	Vista Way west of El Camino Real	City of Oceanside	25,000	21,080	0.843	D	21,174	0.847	D	0.004	NO
4	Vista Way east of El Camino Real	City of Oceanside	25,000	16,094	0.644	B	16,132	0.645	B	0.001	NO
5	Jefferson Street south of Vista Way	City of Oceanside	50,000	42,279	0.846	D	42,335	0.847	D	0.001	NO
6	El Camino Real south of Vista Way	City of Oceanside	60,000	47,988	0.800	C	48,256	0.804	D	0.004	NO
7	El Camino Real north of Plaza Drive	City of Carlsbad	60,000	40,854	0.681	C	41,584	0.693	C	0.012	NO
8	El Camino Real south of Plaza Drive	City of Carlsbad	60,000	24,782	0.413	A	25,127	0.419	B	0.006	NO
9	Marron Road south of Jefferson Street	City of Carlsbad	30,000	12,834	0.428	B	12,893	0.430	B	0.002	NO
10	Marron Road west of El Camino Real	City of Carlsbad	30,000	11,883	0.396	B	12,217	0.407	B	0.011	NO
11	Marron Road east of El Camino Real	City of Carlsbad	30,000	9,297	0.310	A	9,383	0.313	A	0.003	NO
12	Monroe Street south of Marron Road	City of Carlsbad	15,000	9,273	0.618	C	9,408	0.627	C	0.009	NO
13	El Camino Real south of Marron Road	City of Carlsbad	60,000	26,421	0.440	B	26,528	0.442	B	0.002	NO
14	Carlsbad Village Drive west of Monroe Street	City of Carlsbad	30,000	18,734	0.624	C	18,839	0.628	C	0.004	NO
15	Carlsbad Village Drive east of Monroe Street	City of Carlsbad	30,000	8,511	0.284	A	8,506	0.284	A	0.000	NO
16	Jefferson Street south of SR-78 WB Ramps	City of Oceanside	50,000	27,669	0.553	A	27,744	0.555	A	0.002	NO
17	Jefferson Street north of Marron Road	City of Carlsbad	30,000	21,237	0.708	D	21,265	0.709	D	0.001	NO
18	El Camino Real south of SR-78 WB Ramps	City of Oceanside	60,000	46,256	0.771	C	46,722	0.779	C	0.008	NO

* Significant impact criteria for City of Oceanside street segments are an increase in V/C of 0.02 for segments operating at LOS D, E, or F.

Significant impact criteria for City of Carlsbad street segments is an increase in V/C of 0.02 for segments operating at LOS E or F.

Source: Gibson 2012

Table 4.12-11
HORIZON YEAR (YEAR 2030) INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Street Segment	Jurisdiction*	Peak Hour	Horizon Year		Horizon Year Plus Project			
				Delay	LOS	Delay	LOS	Change in Delay	Sig. Impact?
1	El Camino Real at Fire Mountain Drive/ Skyline Drive	City of Oceanside	A.M.	11.4	B	11.4	B	0.0	NO
			P.M.	11.6	B	11.6	B	0.0	NO
2	Jefferson Street/Ivy Road at Vista Way/Ivy Road	City of Oceanside	A.M.	22.7	C	22.7	C	0.0	NO
			P.M.	30.6	C	30.6	C	0.0	NO
3	El Camino Real at Vista Way	City of Oceanside	A.M.	17.1	B	17.1	B	0.0	NO
			P.M.	42.9	D	42.9	D	0.0	NO
4	Rancho del Oro Road at Vista Way	City of Oceanside	A.M.	25.0	C	25.0	C	0.0	NO
			P.M.	22.9	C	22.9	C	0.0	NO
5	Jefferson Street at SR-78 WB Ramps	City of Oceanside/ Caltrans	A.M.	17.6	B	17.6	B	0.0	NO
			P.M.	75.7	E	75.7	E	0.0	NO
6	Jefferson Street at SR-78 EB Ramps	City of Oceanside/ Caltrans	A.M.	18.1	B	18.1	B	0.0	NO
			P.M.	22.2	C	22.2	C	0.0	NO
7	El Camino Real at SR-78 WB Ramps	City of Oceanside/ Caltrans	A.M.	16.3	B	16.3	B	0.0	NO
			P.M.	26.8	C	26.8	C	0.0	NO
8	El Camino Real at SR-78 EB Ramps	City of Oceanside/ Caltrans	A.M.	20.2	C	20.2	C	0.0	NO
			P.M.	29.4	C	29.4	C	0.0	NO
9	El Camino Real at Plaza Drive	City of Carlsbad	A.M.	22.6	C	22.7	C	0.1	NO
			P.M.	32.0	C	32.0	C	0.0	NO
10	Jefferson Street/Marron Road at Jefferson Street	City of Carlsbad	A.M.	25.8	C	25.8	C	0.0	NO
			P.M.	49.5	D	49.5	D	0.0	NO
11	Monroe Street at Marron Road	City of Carlsbad	A.M.	30.2	C	30.2	C	0.0	NO
			P.M.	41.7	D	41.7	D	0.2	NO
12	Project Driveway at Marron Road	City of Carlsbad	A.M.	6.2	A	9.4	A	3.2	NO
			P.M.	16.2	B	16.7	B	0.5	NO

Table 4.12-11 (cont.)
HORIZON YEAR (YEAR 2030) INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Street Segment	Jurisdiction*	Peak Hour	Horizon Year		Horizon Year Plus Project			
				Delay	LOS	Delay	LOS	Change in Delay	Sig. Impact?
13	El Camino Real at Marron Road	City of Carlsbad	A.M.	28.7	C	28.7	C	0.0	NO
			P.M.	36.4	D	36.4	D	0.0	NO
14	I-5 SB Ramps at Carlsbad Village Drive	City of Carlsbad/ Caltrans	A.M.	21.7	C	21.7	C	0.0	NO
			P.M.	22.9	C	22.9	C	0.0	NO
15	I-5 NB Ramps at Carlsbad Village Drive	City of Carlsbad/ Caltrans	A.M.	26.5	C	26.5	C	0.0	NO
			P.M.	29.0	C	29.0	C	0.0	NO
16	Monroe Street at Carlsbad Village Drive	City of Carlsbad	A.M.	33.6	C	33.7	C	0.1	NO
			P.M.	41.3	D	41.3	D	0.0	NO
17	El Camino Real at Carlsbad Village Drive	City of Carlsbad	A.M.	26.2	C	26.2	C	0.0	NO
			P.M.	36.6	D	36.6	D	0.0	NO
18	El Camino Real at Hosp Way	City of Carlsbad	A.M.	23.4	C	23.4	C	0.0	NO
			P.M.	28.3	C	28.3	C	0.0	NO

* Significant impact criteria for City of Oceanside intersections are an increase in V/C of 0.02 for segments operating at LOS E, or F.

Significant impact criteria for City of Carlsbad intersections is an increase in V/C of 0.02 for segments operating at LOS E or F.

Source: Gibson 2012

Alternative Transportation

With regard to whether the proposed project would conflict with applicable policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks), the SP and SDP would not change the location or capacity of the Westfield Carlsbad Transit Center or any bus turnouts. Future employees and patrons of the expanded and renovated shopping center would be able to access the project via alternative transit. The project would be consistent with Circulation Element policies of the City General Plan that promote the use of alternative transportation methods such as walking, bicycling and public transportation. No significant impacts would occur.

4.12.4 Mitigation Measures

As discussed above, the project would not add enough traffic to result in an increase in delay of 2.0 seconds or more at any of the analyzed intersections that are projected to operate at LOS E or F during Existing Baseline Plus Project, Near Term (Year 2020), or Horizon Year (Year 2030) conditions. Additionally, the project would not add enough traffic to result in an increase in daily V/C of 0.02 or greater at street segments projected to operate at LOS D or worse, or a decrease in peak hour speed of 1.0 mph or greater at street segments projected to operate at LOS E or F. Therefore, the project is not expected to result in a direct significant impact at any of the analyzed intersections or street segments. No mitigation for direct project impacts is required.

However, indirect cumulative impacts to three roadway segments within the City of Oceanside would be considered significant. Refer to the Cumulative Impacts discussion in Section 5.1 for a summary of the analysis of the cumulative traffic impacts. The following mitigation will be required by the City of Oceanside to reduce indirect cumulative impacts to the segments of Vista Way (west of El Camino Real), Jefferson Street (south of Vista Way) and El Camino Real (south of Vista Way) to less than significant levels.

T-1 Prior to issuance of building or grading permit (whichever comes first) for the current SDP proposal, the project applicant shall pay a fair-share contribution toward adaptive-responsive signals along the segments of Vista Way (west of El Camino Real), Jefferson Street (south of Vista Way) and El Camino Real (south of Vista Way) to the satisfaction of the City of Carlsbad Traffic Engineer.

4.12.5 Level of Significance after Mitigation

No significant direct impacts have been identified within the project study area. The project's contribution to indirect cumulative impacts at three roadway segments in the City of Oceanside will be mitigated to less than significant levels through the implementation of mitigation measure T-1.